S5000

SCHEMATICS

tau-tron

A UNIT OF
GENERAL SIGNAL

S5000

SCHEMATICS

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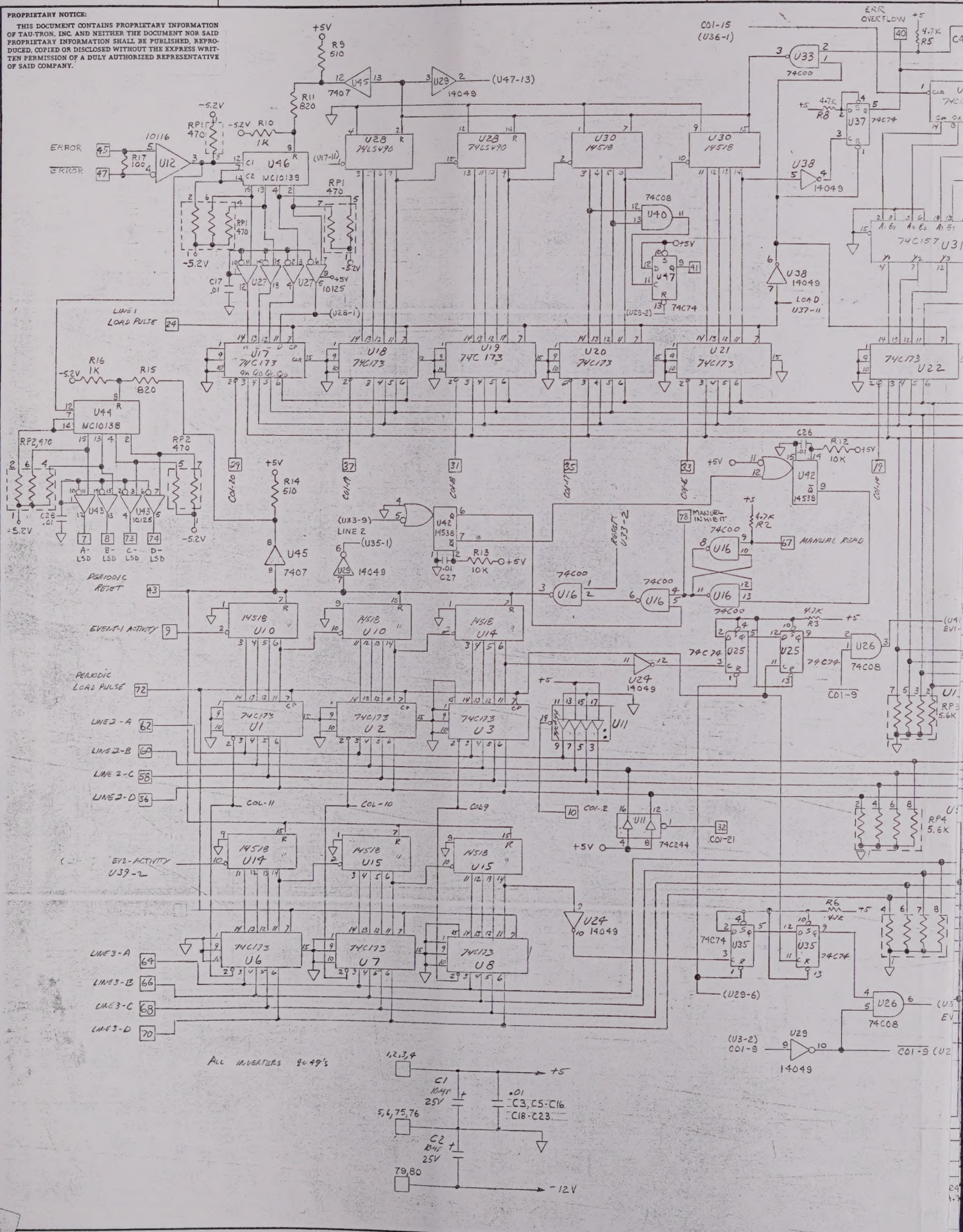

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	0	ORIGINATED		
	1	REV PER ENG. CHNGS, RELEASED TO PROD. C.G. 8-21-80	9-5-80	KAB 9-8-80
	A	REVISED & RELEASED PER DCN 00778 2-3-81	2-17-81	KAB
	B	REV PER ECO/00989 Robinson 9/8/81	9-15-81	KB
	C	REV PER ECO-12 42 RIDUNS 11-4 82	11-9-82	VC TD
	D	UPDATED PER DOC. ACCURACY PROG. PER ECO # 02364 RRR 1-2-86	1/20/86	PR

LAST REF DES. USED	UNUSED
U46	
C28	
R17	R4
CR2	
Q1	

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± FRACTIONS ± 3 PLACE DECIMALS ± 2 PLACE DECIMALS ± 1 PLACE DECIMALS ±	CONTR NO. DR K. BERUBE CHKD LA PLANTE 15 MAR 80 APPD K. BERUBE 3-31-80
D-66009 / 55000 NEXT ASSY / USED ON APPLICATION	MATERIAL:	APPROVED BY DIRECTION OF

tau-tron INC
Chelmsford, Ma. 01824

DRAWING TITLE
ACCUMULATOR CIRCUITS SCHEMATICS

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		66007	D

SCALE NONE | 55000 | SHEET 1 OF 1

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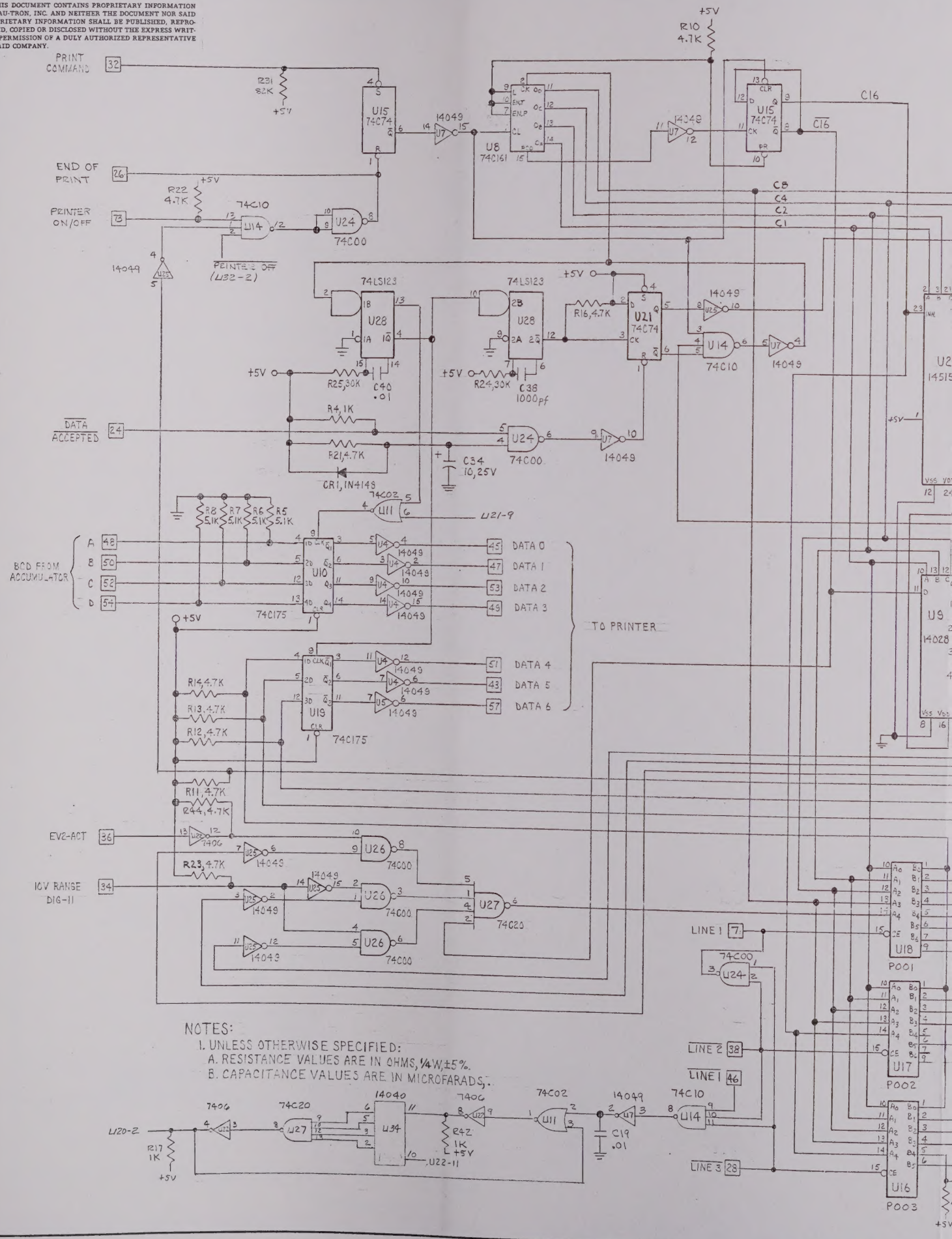

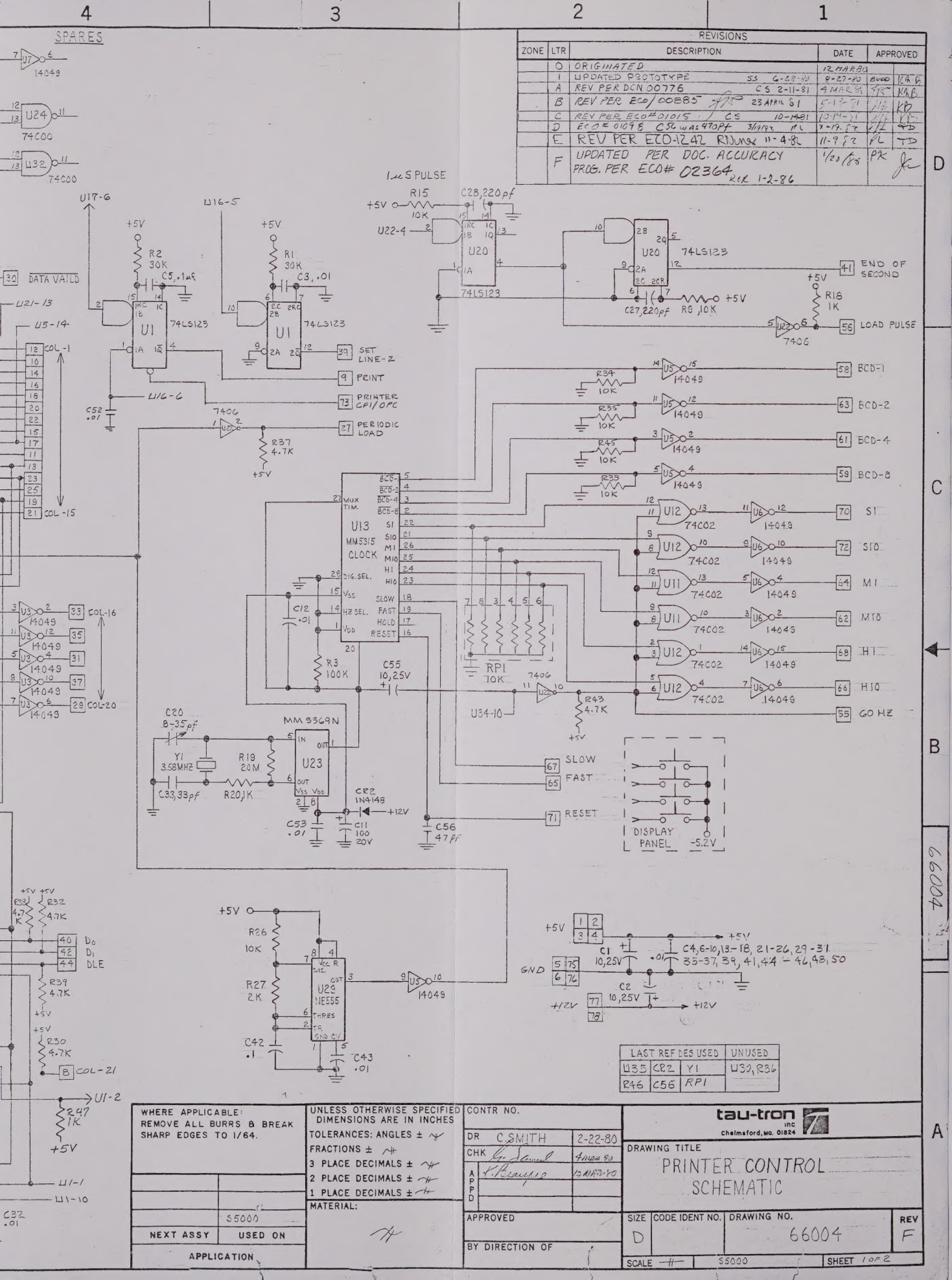
SPARES
U7
14049
U24
74C00
U32
74C00
REVISIONS
ZONE | LTR | DESCRIPTION | DATE | APPROVED
O ORIGINATED 12 MAR 80
I UPDATED PROTOTYPE SS 6-18-80 8-27-80 BWD KAG
A REV PER DCN 00776 CS 2-11-81 4 MAR 81 KAG
B REV PER ECO 00885 23 APRIL 81 5-13-81 KAG
C REV PER ECO#01015 CS 10-14-81 10-14-82 KAG
D ECO# 01078 C56 WAS 470pF 3/19/82 9-19-82 KAG
E REV PER ECO-1242 RJ/MK 11-4-82 11-9-82 PL TD
F UPDATED PER DOC. ACCURACY PROG. PER ECO# 02364 RJK 1-2-86 1/23/86 PK
1 uS PULSE
R15 10K
C28,220pf
U22-4
U20
74LS123
C27,220pf
R9 10K
+5V
R16 1K
U22
7406
41 END OF SECOND
56 LOAD PULSE
U17-6
U16-5
R2 30K
C5, .1uF
R1 30K
C3, .01
U1
74LS123
30 DATA VALID
U21-13
U3-14
COL-1
COL-15
39 SET LINE-2
9 PRINT
73 PRINTER CPI/OPC
U16-6
C52 .01
7406
27 PERIODIC LOAD
R37 4.7K
R34 10K
R35 10K
R45 10K
R33 10K
U5
14049
58 BCD-1
63 BCD-2
61 BCD-4
59 BCD-8
U13
MM5315
CLOCK
MUX TIM.
BCD-1
BCD-2
BCD-4
BCD-8
S1
S10
M1
M10
H1
H10
DIG.SEL.
VSS
HZ SEL.
VDD
SLOW
FAST
HOLD
RESET
U12
U11
74C02
U6
14049
70 S1
72 S10
64 M1
62 M10
68 H1
66 H10
55 60 HZ
C12 .01
R3 100K
C55 10,25V
RP1 10K
U34-10
7406
R43 4.7K
COL-16
COL-20
C20 8-35pf
Y1 3.58MHZ
R19 20M
R20 1K
C33, 33pf
MM5369N
U23
CR2 1N4148
+12V
C53 .01
C11 100 20V
C56 47pf
67 SLOW
65 FAST
71 RESET
DISPLAY PANEL
-5.2V
R32 4.7K
40 D0
42 D1
44 DLE
R39 4.7K
R30 4.7K
8 COL-21
U1-2
2.47 1K
U1-1
U1-10
C32 .01
R26 10K
R27 2K
U29
NE555
C42 .1
C43 .01
C1 10,25V
C2 10,25V
C4,6-10,13-18,21-26,29-31
35-37,39,41,44-46,48,50
GND
+12V
LAST REF DES USED | UNUSED
U35 | CR2 | Y1 | U32, R36
R46 | C56 | RP1
WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:
NEXT ASSY | USED ON
S5000
APPLICATION
CONTR NO.
DR C.SMITH 2-22-80
CHK 4 MAR 80
APPD K. Beaupre 12 MAR 80
APPROVED
BY DIRECTION OF
tau-tron INC Chelmsford, MA. 01824
DRAWING TITLE
PRINTER CONTROL SCHEMATIC
SIZE D | CODE IDENT NO. | DRAWING NO. 66004 | REV F
SCALE — | S5000 | SHEET 1 OF 2
66004

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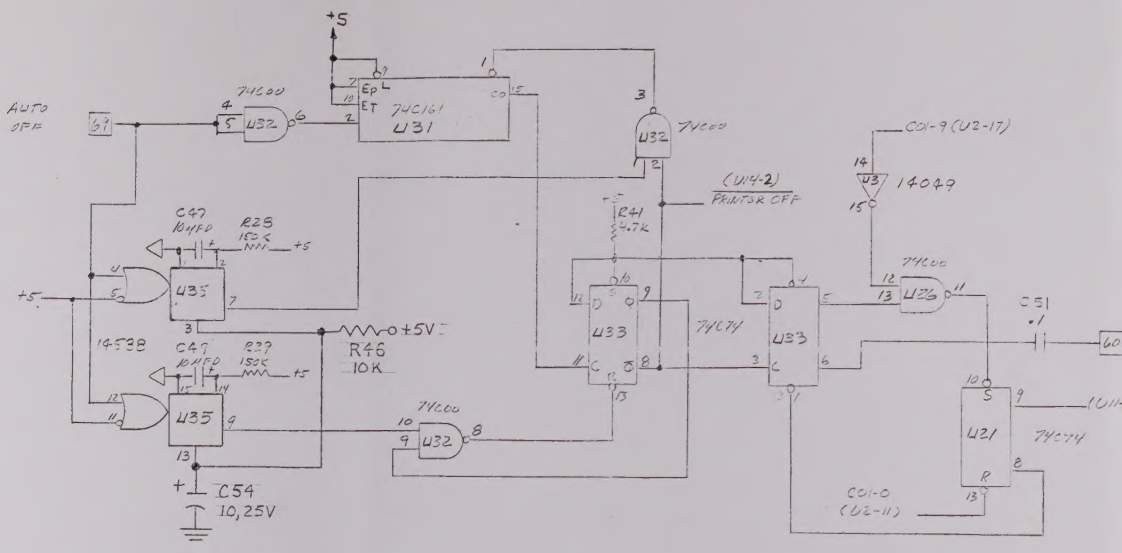

4	3	2	1

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
		SEE SHEET 1 FOR REV'S		

D

C

B

A

66004

	55,000
NEXT ASSY	USED ON
APPLICATION	

WHERE APPLICABLE:
REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ± N/A
FRACTIONS ± N/A
3 PLACE DECIMALS ± N/A
2 PLACE DECIMALS ± N/A
1 PLACE DECIMALS ± N/A
MATERIAL: N/A

CONTR NO.

DR	K. Beaupre	8-28-80
CHK	BUDD	8-28-80
APPD	K. Beaupre	8-29-80

APPROVED

BY DIRECTION OF

tau-tron INC
Chelmsford, Ma. 01824

DRAWING TITLE
PRINTER CONTROL
SCHEMATIC

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		66004	F

SCALE N/A SHEET 2 OF 2

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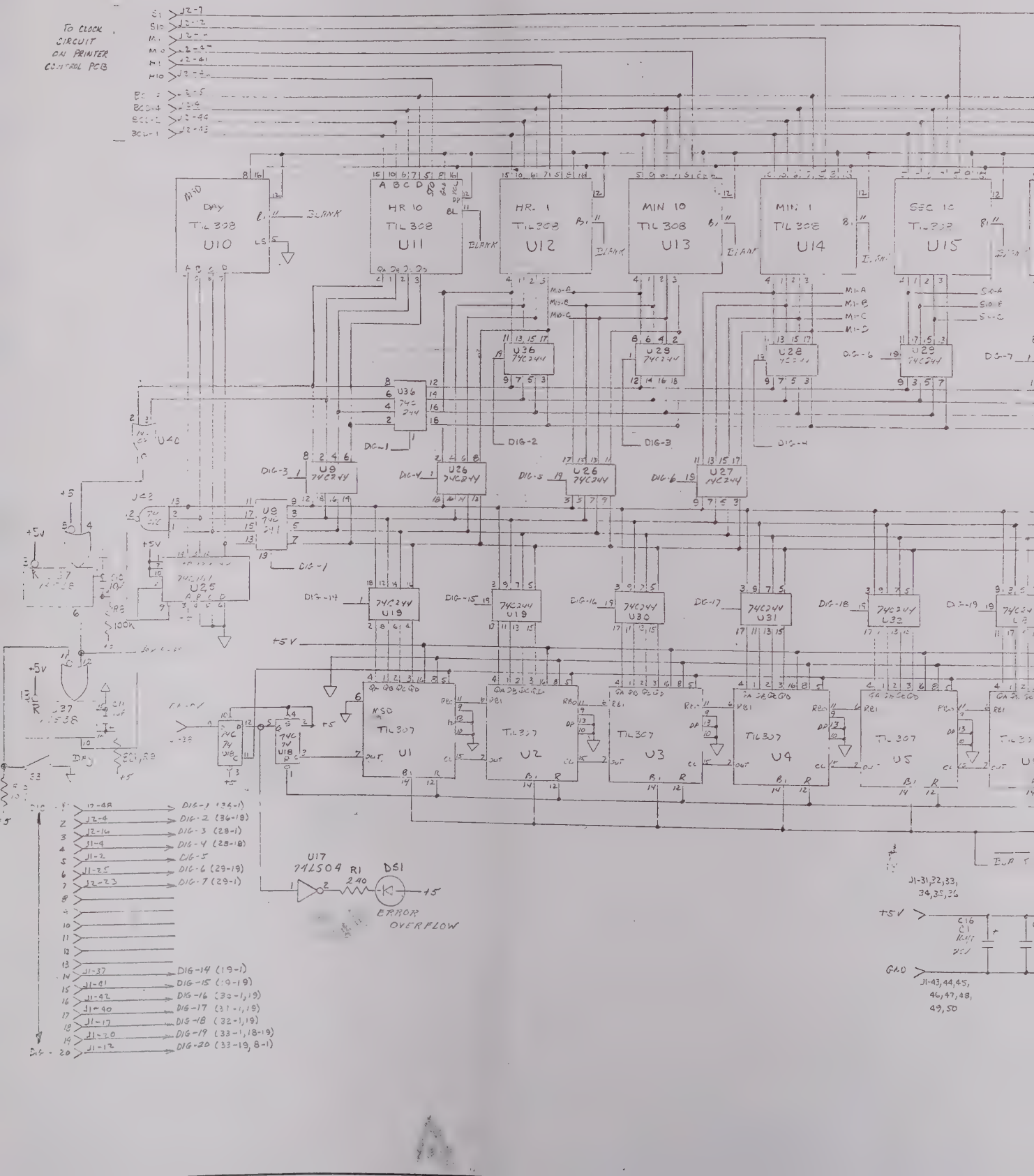
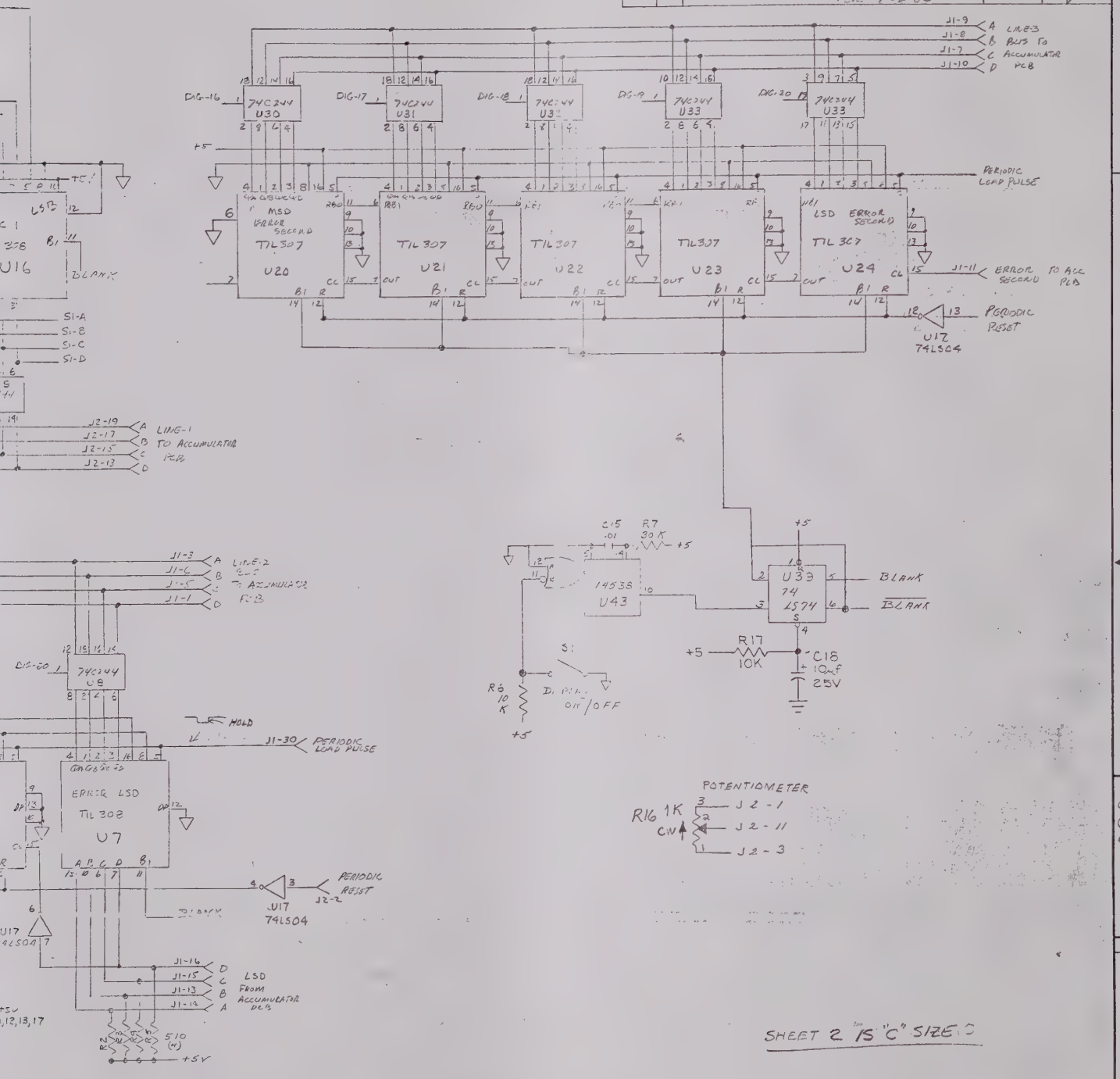


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	1	REVISED, .. C.S. 8-8-80	8-13-80	
	A	REVISD PER DCN00777 12-15-80	12-13-81	
	B	REV PER DCN 00842	3-3-81	
	C	REV PER ECO#00941 CS 6-17-81	6-18-81	
	D	REV PER ECO#01014 CS 10-14-81	10-14-81	
	E	REV PER ECO#1359. BMB 3-21-83	3-22-83	
	F	UPDATED PER DOC. ACCURACY PROG. PER ECO# 02364 MCR 1-2-86	1/20/86	



SHEET 2 IS "C" SIZE

REFERENCE DESIGNATIONS	
MK USED	UNUSED
R16	
RP1	
C15	
U43	U9
CR1	

WHERE APPLICABLE REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.

D-C-6011	S5000
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:

CONTR NO.

DR	K. Reaning	
CHK	B.C.	8-13-80
APPD	K. Reaning	12/31/80

APPROVED
BY DIRECTION OF

tau-tron inc
Chelmsford, Ma. 01824

DRAWING TITLE
S5000 PRINTING ERROR ANALYZER FRONT PANEL SCHEMATIC

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		66010	F

SCALE 3/8" = 1" SHEET 1 OF 2

66010

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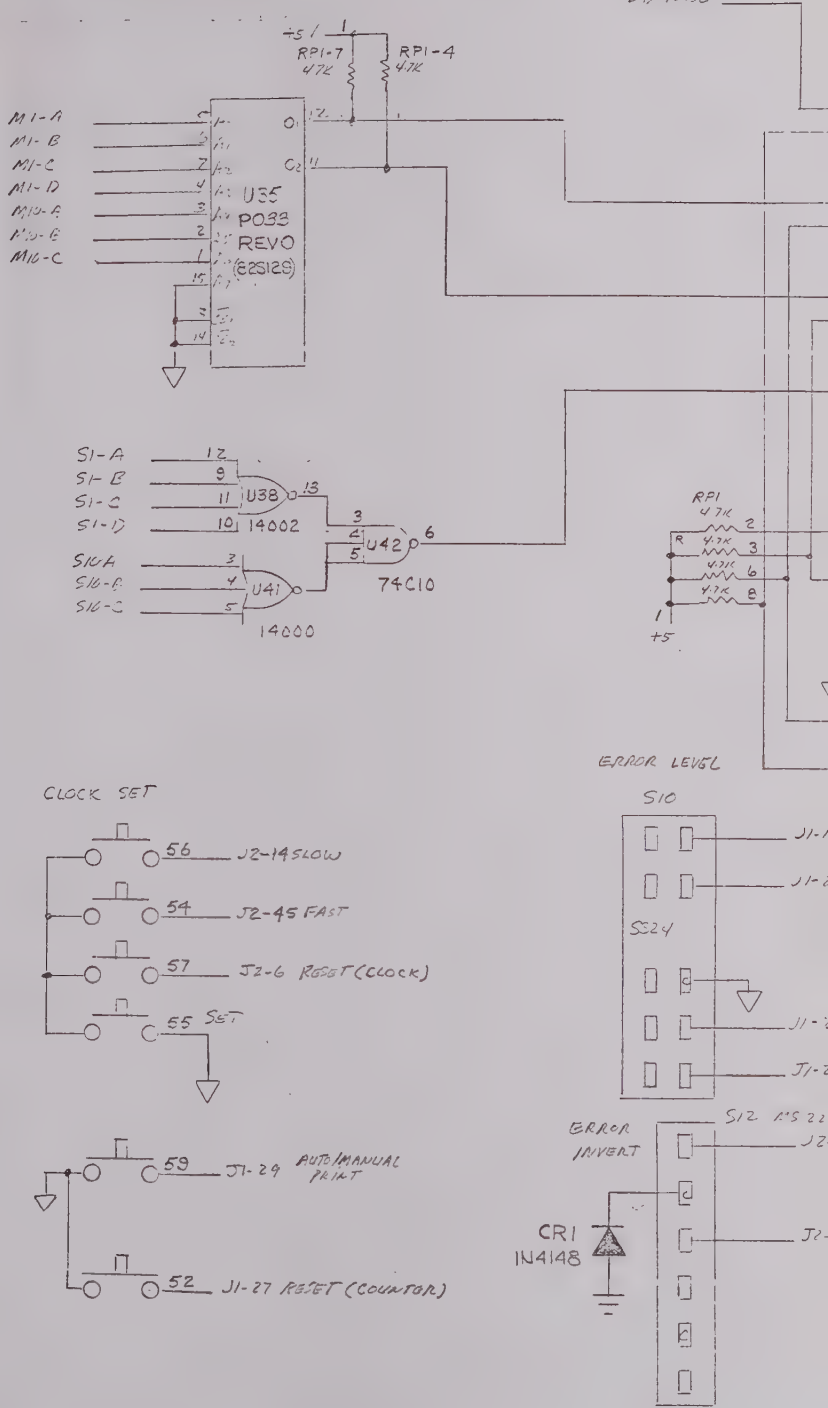
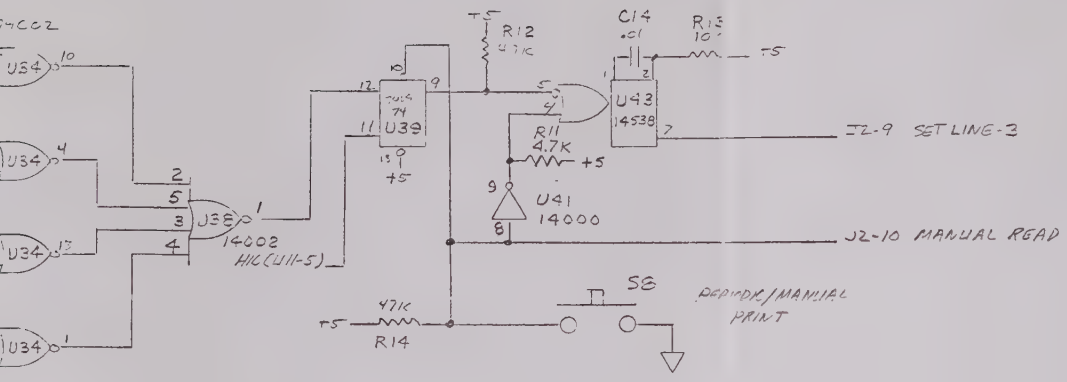


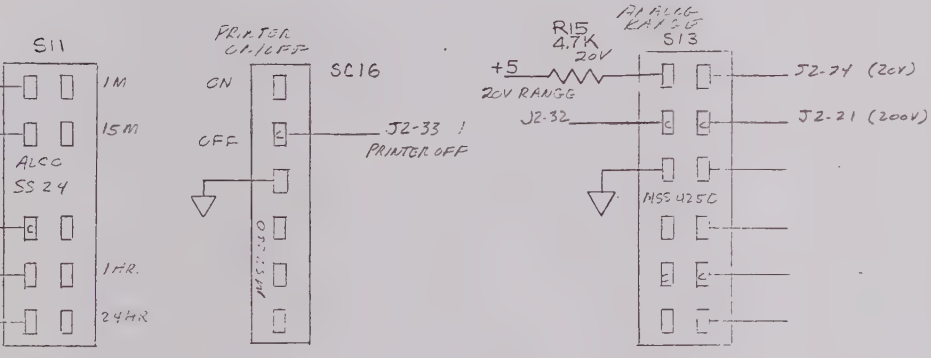
WHERE APPL
REMOVE ALL
SHARP EDGE

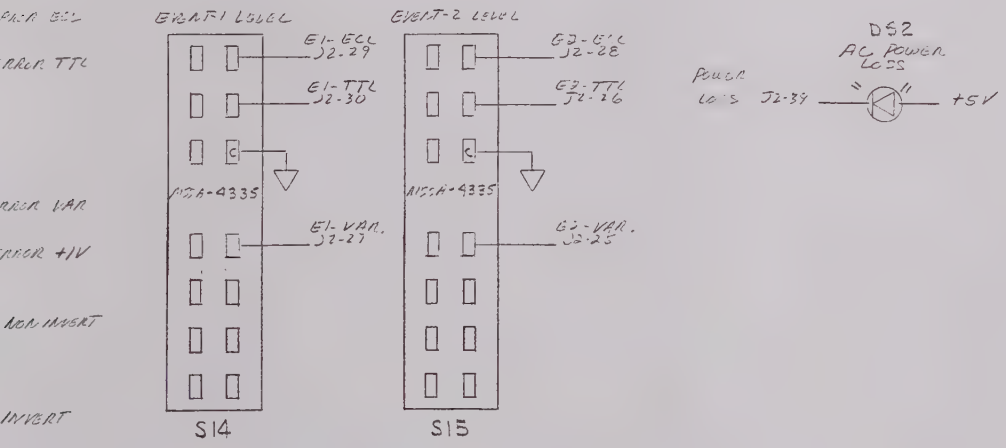
NEXT ASS

AP

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		SEE SH.1 FOR REVISIONS		







SHT. 1 IS A "D" SIZE

ABLE: URRS & BREAK TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± FRACTIONS ± 3 PLACE DECIMALS ± 2 PLACE DECIMALS ± 1 PLACE DECIMALS ±	CONTR NO.	tau-tron INC Chelmsford, Ma. 01824
		DR K. Erasmus	DRAWING TITLE S5000 FRONT PANEL PCB SCHEMATIC
		CHK R. Cooper 9-17-80	
		APPD	
55000	MATERIAL:	APPROVED	SIZE C / CODE IDENT NO. / DRAWING NO. 66010 / REV F
USED ON		BY DIRECTION OF	SCALE ~~H~~ 55000 / SHEET 2 OF 2
CATION			

01099

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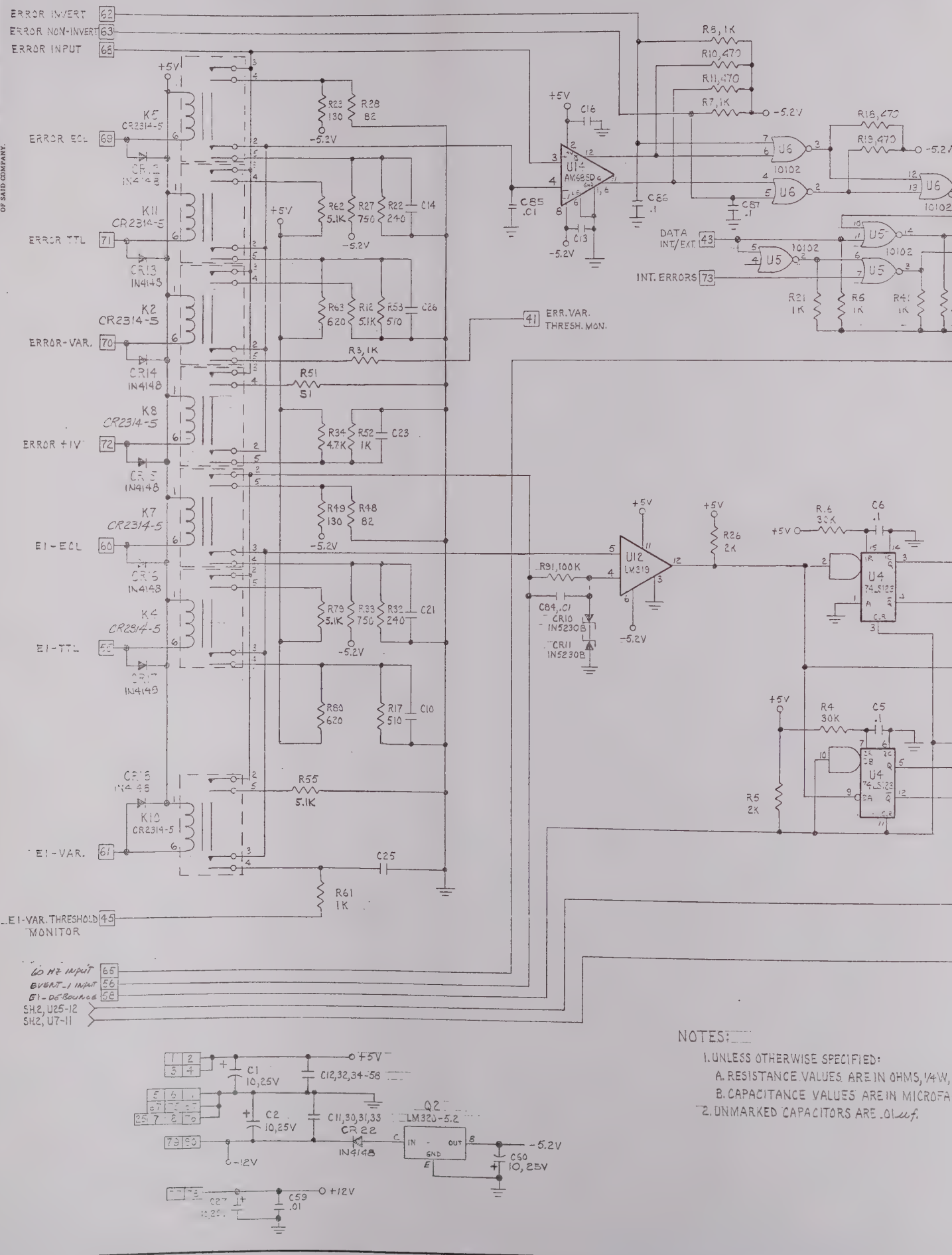

NOTES:

1. UNLESS OTHERWISE SPECIFIED:
   A. RESISTANCE VALUES ARE IN OHMS, 1/4W,
   B. CAPACITANCE VALUES ARE IN MICROFA
2. UNMARKED CAPACITORS ARE .01 uf.

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	0	ORIGINATED 4-24-80 C.S.	4/24/80	
	1	ENGINEER REV. 9-16-80 C.S.		
	A	REVISED & RELEASED PER DCN00181 JJ 2-17-81	3-9-81	
	B	REV PER ECO 00904 C.S. 4-30-81	5-19-81	
	C	REV PER ECO-01090 RNiver 2-16-82	2-16-82	
	D	UPDATED PER DOC. ACCURACY PROG. PER ECO# 02364 RCR 1-2-86	1/20/86	

LAST REF.DES. USED	UNUSED
U42	
R81	
C88	
CR22	CR8,9
Q2	
K9	

SHT 3 IS A 'C' SIZE.

REFERENCE DRAWINGS:
ASSEMBLY: D-66018
FABRICATION: D-66017

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:

CONTR NO.

DR	[illegible]	4-24-80
CHK	[illegible]	25APR80
APPD	[illegible]	4/25/80

APPROVED
BY DIRECTION OF

tau-tron inc
Chelmsford, Ma. 01824

DRAWING TITLE
SCHEMATIC, INPUT CIRCUIT BOARD

D-66018	S5000
NEXT ASSY	USED ON
APPLICATION	

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		66019	D

SCALE -4- S5000 SHEET 1 OF 3

66019

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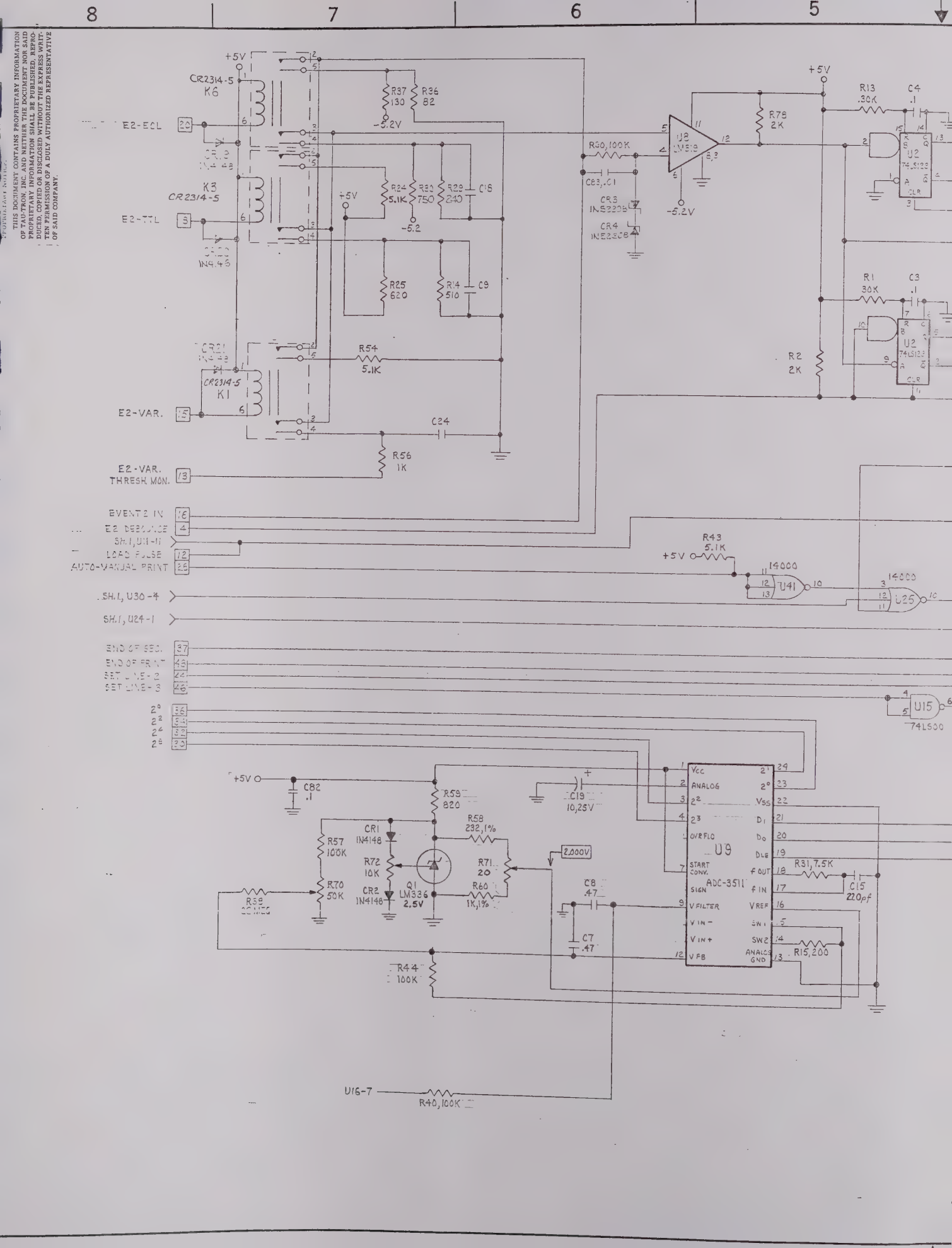

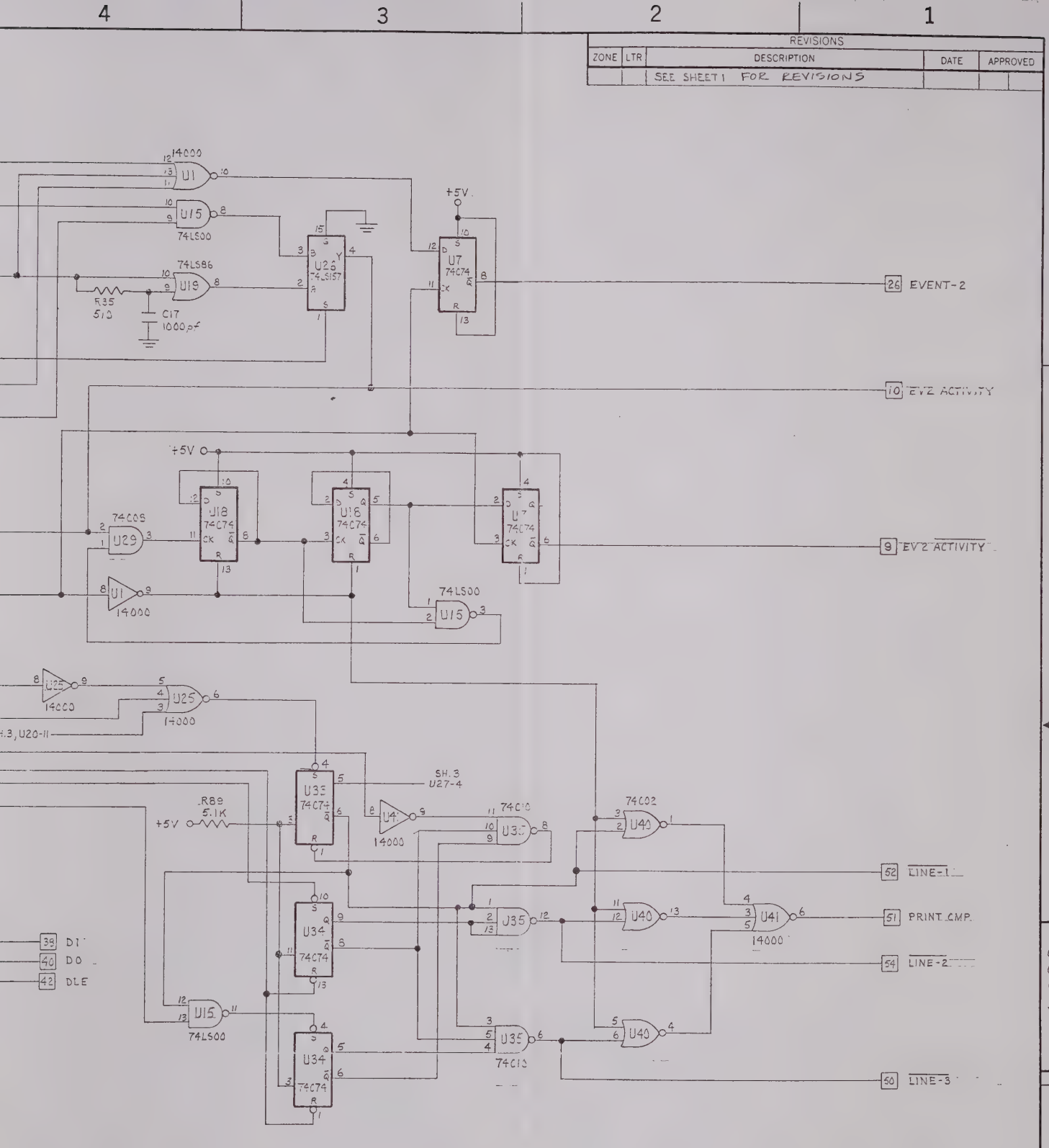

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± ~ FRACTIONS ± ~ 3 PLACE DECIMALS ± ~ 2 PLACE DECIMALS ± ~ 1 PLACE DECIMALS ± ~	CONTR NO.		tau-tron inc Chelmsford, Ma. 01824	
		DR C. Langston	4-24-80	DRAWING TITLE	SCHEMATIC INPUT CIRCUIT BOARD
		CHK [illegible]	25 APR 80		
		APPD S.P. Winchell	4/24/80		
D-66018 / 55000	MATERIAL: ~	APPROVED		SIZE D	CODE IDENT NO.
NEXT ASSY / USED ON		BY DIRECTION OF		DRAWING NO. 66019	REV D
APPLICATION				SCALE ~ / 55000	SHEET 2 OF 3

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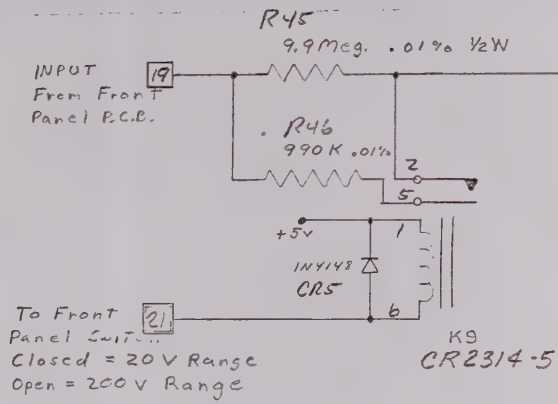
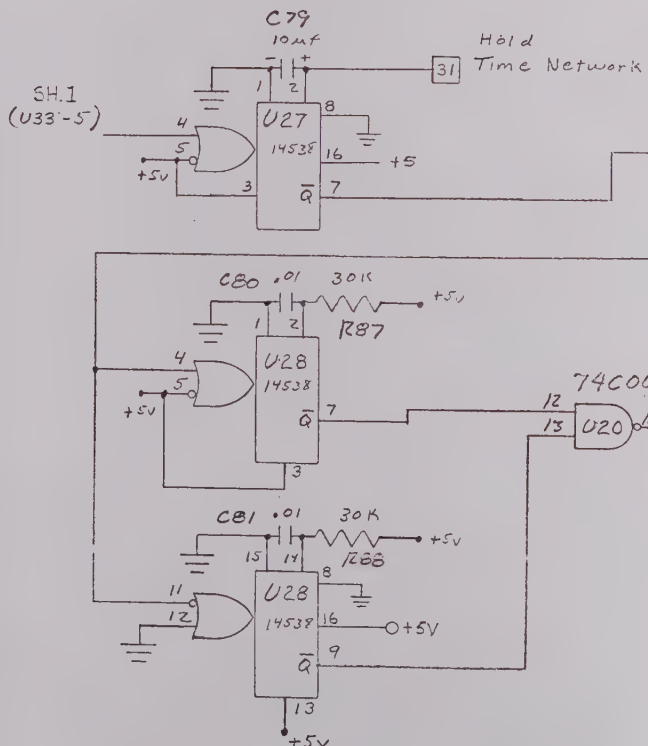




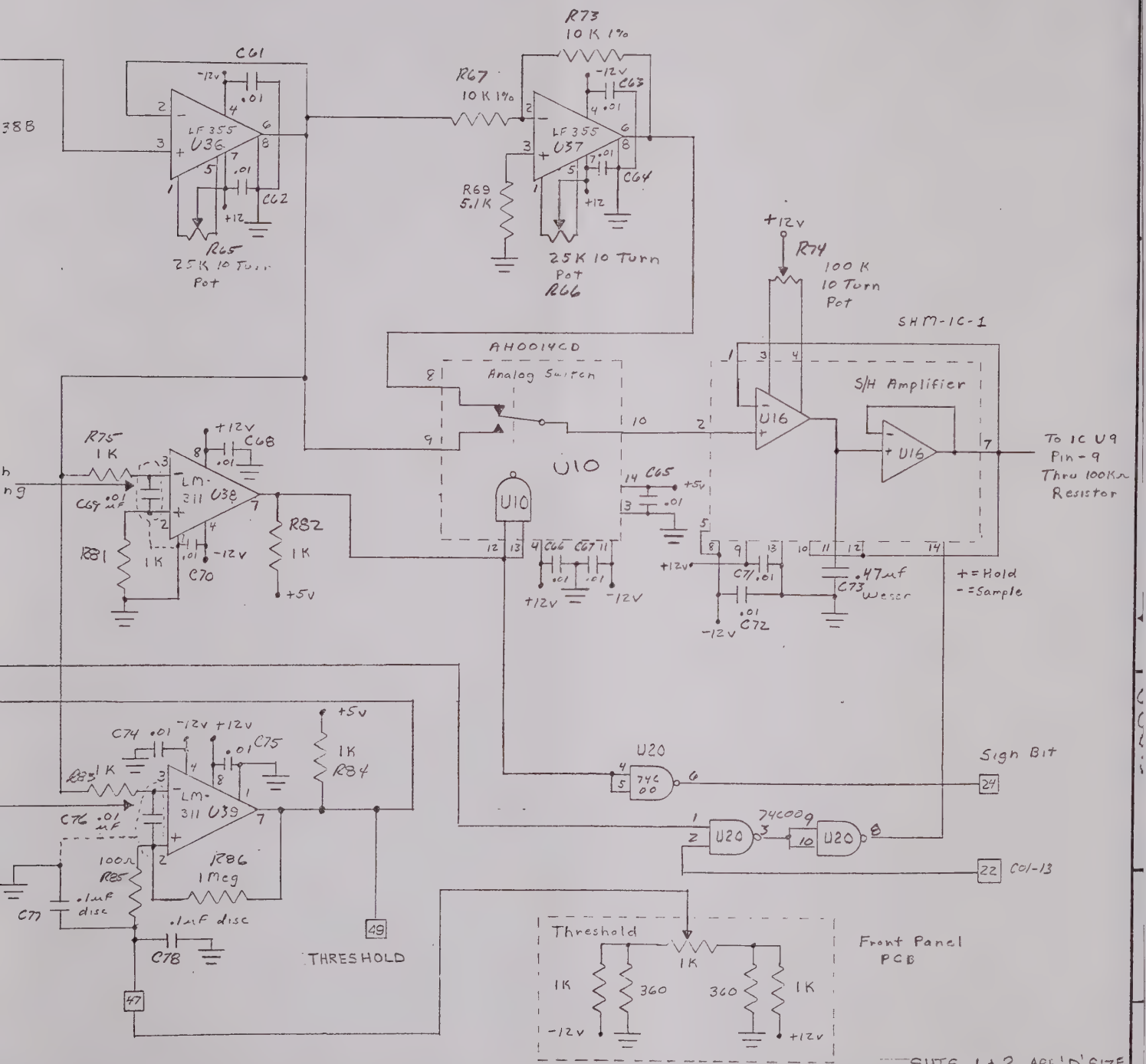
P.C. c... ground ...

WHERE ... REMOV... SHARP

D-6...

NEXT

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
SEE SHEET 1 FOR REVISIONS				



SHTS 1 & 2 ARE 'D' SIZE

PLICABLE:
LL BURRS & BREAK
GES TO 1/64.

8	55000
SY	USED ON
PPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:

CONTR NO.

DR	C Smith	4-24-80
CHK		
APPD		

APPROVED
BY DIRECTION OF

tau-tron inc
Chelmsford, Ma. 01824

DRAWING TITLE
INPUT CIRCUIT BOARD
SCHEMATIC

SIZE	CODE IDENT NO.	DRAWING NO.	REV
C		66019	D
SCALE ~	55000	SHEET 3 of 3	

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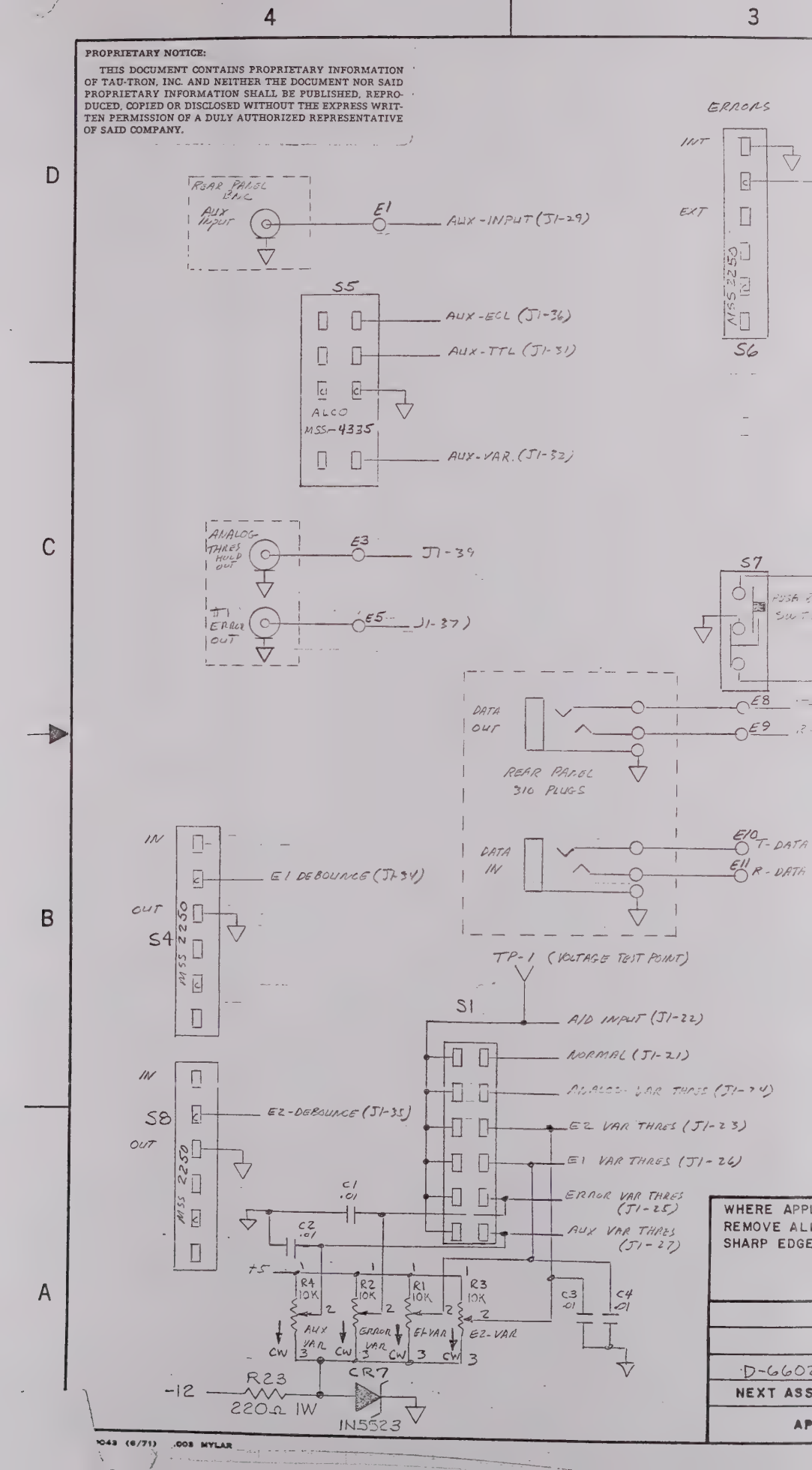


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	REVISED & RELEASED PER DCN00780	12-18-80	BAC
	B	REV PER DCN 00850	2-26-81	BAC
	C	REV PER ECO # 01931 M.E.H 8-13-84	8-14-84	
	D	UPDATED PER DOC. ACCURACY PROG. PER ECO# 02364	1/20/86	PR

DATA - IN/EXT (J1-14)

PRINTER SQUELCH MODE S2

OFF

LINE PRINT

(J1-11) LOAD PULSE

5524

(J1-10) AUTO OFF

< 10^5 ERRORS

(J1-12) OVER FLOW

< 5×10^3 ERRORS

(J1-15) PARITY

NGLE ERROR (J1-17)

(J1-6)

(J1-8)

ANALOG HOLD TIME

+5

R5 10K
R6 20K
R7 30K
R8 39K
R9 51K
R10 62K
R11 82K
R12 100K

S3

J1-38 HOLD TIME

J1 / TO J3 MOTHER BOARD			
T-DATA OUT	2	1	GND
R-DATA OUT	4	3	+5
T-DATA IN	6	5	+5
R-DATA IN	8	7	GND
AUTO OFF	10	9	GND
OVERFLOW	12	11	LOAD PULSE
DATA-IN/EXT	14	13	
	16	15	PARITY
DOUBLE ERROR	18	17	[illegible]
GND	20	19	
A/D INPUT	22	21	ANALOG HOLD TIME
FILTER SAR TIMES	24	23	L = VAR
CLOCK	26	25	T/REF-VAR
GND	28	27	AUX VAR. TIMES
GND	30	29	AUX INPUT
AUX-VAR	32	31	AUX-TTL
EXT REFERENCE	34	33	AUX V-PULSE
AUX-ECL	36	35	EXT REFERENCE
HOLD TIME	38	37	ERROR OUT
AC LINE	40	39	TRIM HOLD
GND	42	41	RESET
-12	44	43	-12
+5	46	45	+5
+5	48	47	+5
GND	50	49	GND

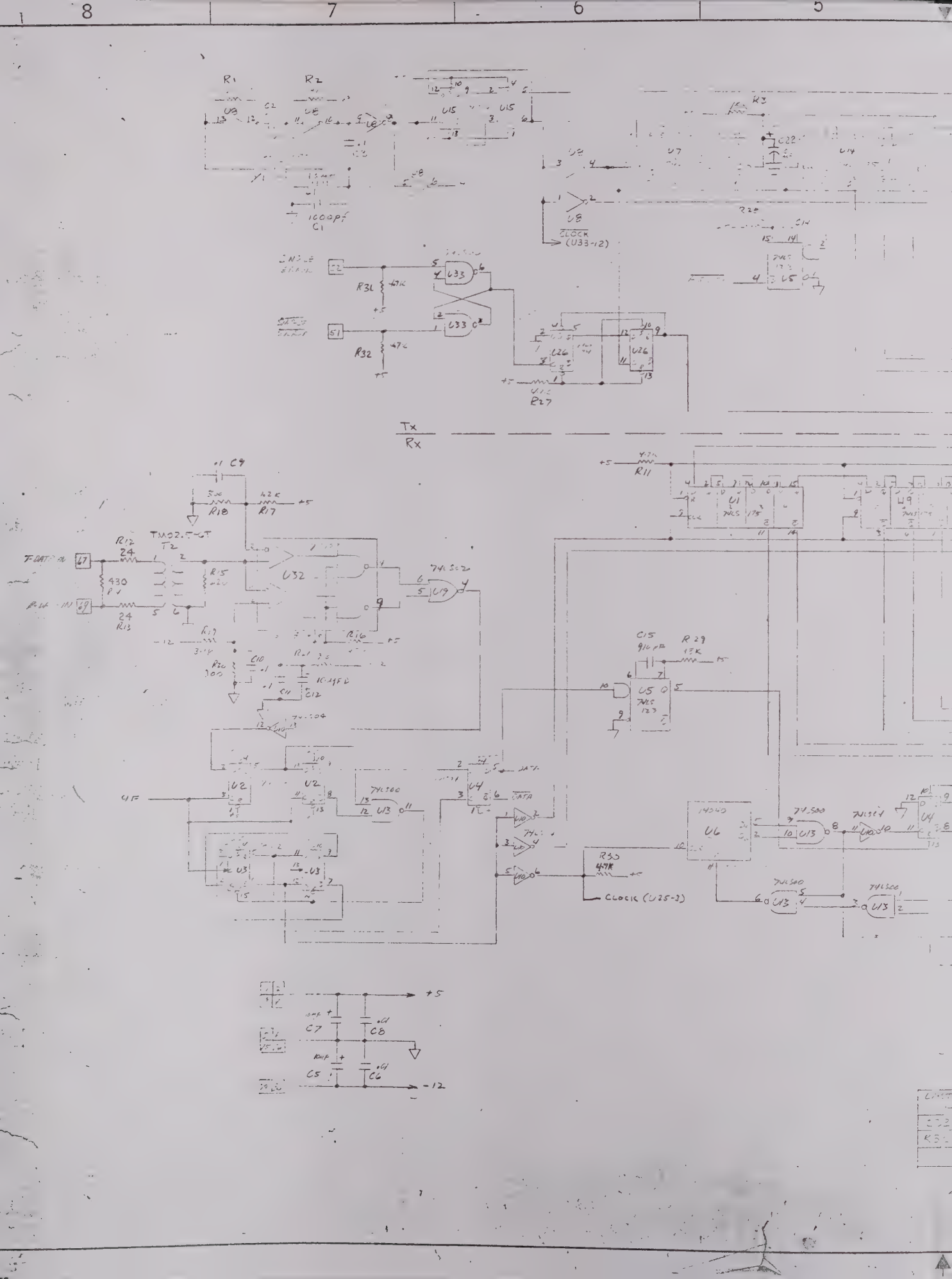
NOTE: J1 IS A FLAT CABLE RECEPTACLE.

REFERENCE DESIGNATIONS	
LAST USED	UNUSED
R23	R15
C8	
CR7	
U2	

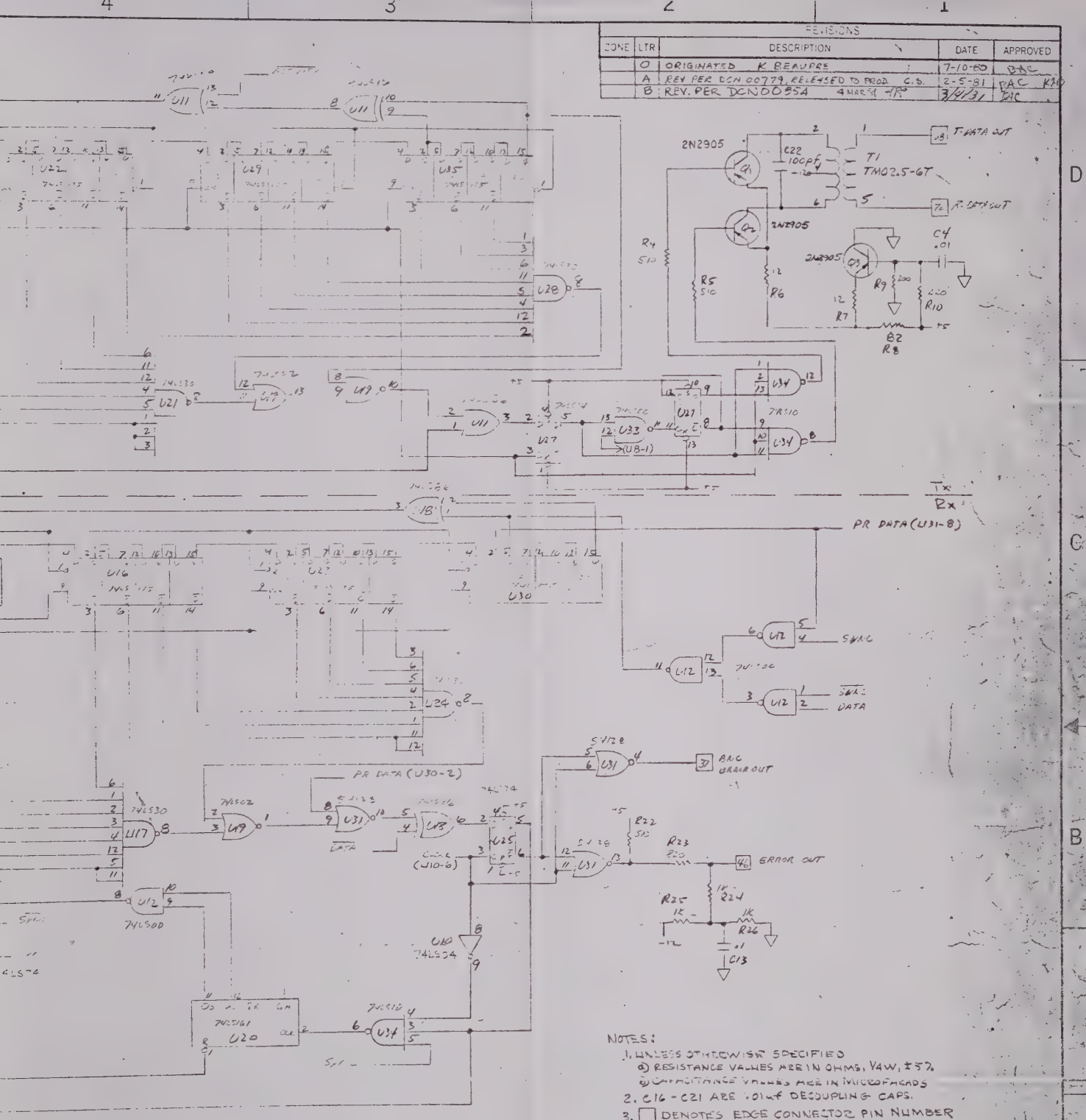
R13 15K
C5 4.7MF
R16 1K
CR2 IN4148
AC INPUT E12
CR1 IN4148
74LS123 U1
R24 1K
CR3 IN5229
C6 47MFD
R14 4.7K
C7 4.7MFD
R19 4.07K
74LS74 U2
R21 2KD
AC FAIL LED (J1-40)
R20 1K
CR4 IN4148
C8 10MFD
CR6 IN4148
RESET (J1-41)
R22 4.7K
R17 24K
DC INPUT E7
CR5
R18 10K

66027 D

ABLE: BURRS & BREAK TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CONTR NO.		tau-tron INC Chelmsford, Ma. 01824
	TOLERANCES: ANGLES ±	DR K. Bourque	6/4/80	DRAWING TITLE
	FRACTIONS ±	CHK A. MONTERIO	9/26/80	REAR PANEL PCB SCHEMATIC
	3 PLACE DECIMALS ±	APPD K. Bourque	8/26/80	
	2 PLACE DECIMALS ±			
	1 PLACE DECIMALS ±			
55000	MATERIAL:	APPROVED		SIZE C / CODE IDENT NO. / DRAWING NO. 66027 / REV D
USED ON		BY DIRECTION OF		SCALE 55000 / SHEET 1 OF 1
ICATION				


R1
R2
C2
U3
U8
U15
Y1
15.360MHz
1000pF
C1
R3
C22
U7
U14
U2
U8
CLOCK (U33-12)
C14
U5
R31 47K
R32 47K
U33
U26
R27
Tx
Rx
C9
R18 5K
R17 4.2K
+5
R11 4.7K
U1
U9
TM32.5-CT
T2
R12 24
R15 430
R13 24
U32
74LS02
U19
R19
R16
R20 300
C10 .1
C11 .1
C12 10MFD
74LS04
C15 910PF
R29 12K
U5
74LS123
U2
74LS00
U3
U4
DATA
U6
14540
74LS00
R33 4.7K
CLOCK (U25-3)
74LS04
C7 10MF
C8 .01
C5 10MF
C6 .01
+5
-12

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	O	ORIGINATED K BEAUDRE	7-10-80	BAC
	A	REV PER DCN 00779, RELEASED TO PROD C.S.	2-5-81	RAC KJB
	B	REV. PER DCN00854 4 MARCH 81	3/4/81	BAC



NOTES:
1. UNLESS OTHERWISE SPECIFIED
   a) RESISTANCE VALUES ARE IN OHMS, 1/4W, ±5%
   b) CAPACITANCE VALUES ARE IN MICROFARADS
2. C16 - C21 ARE .01uF DECOUPLING CAPS.
3. ☐ DENOTES EDGE CONNECTOR PIN NUMBER

REF DES	
U35	U1
U23	Y1
	T2

WHERE APPLICABLE REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±

MATERIAL:

TDK-66032	S5000
NEXT ASSY	USED ON
APPLICATION	

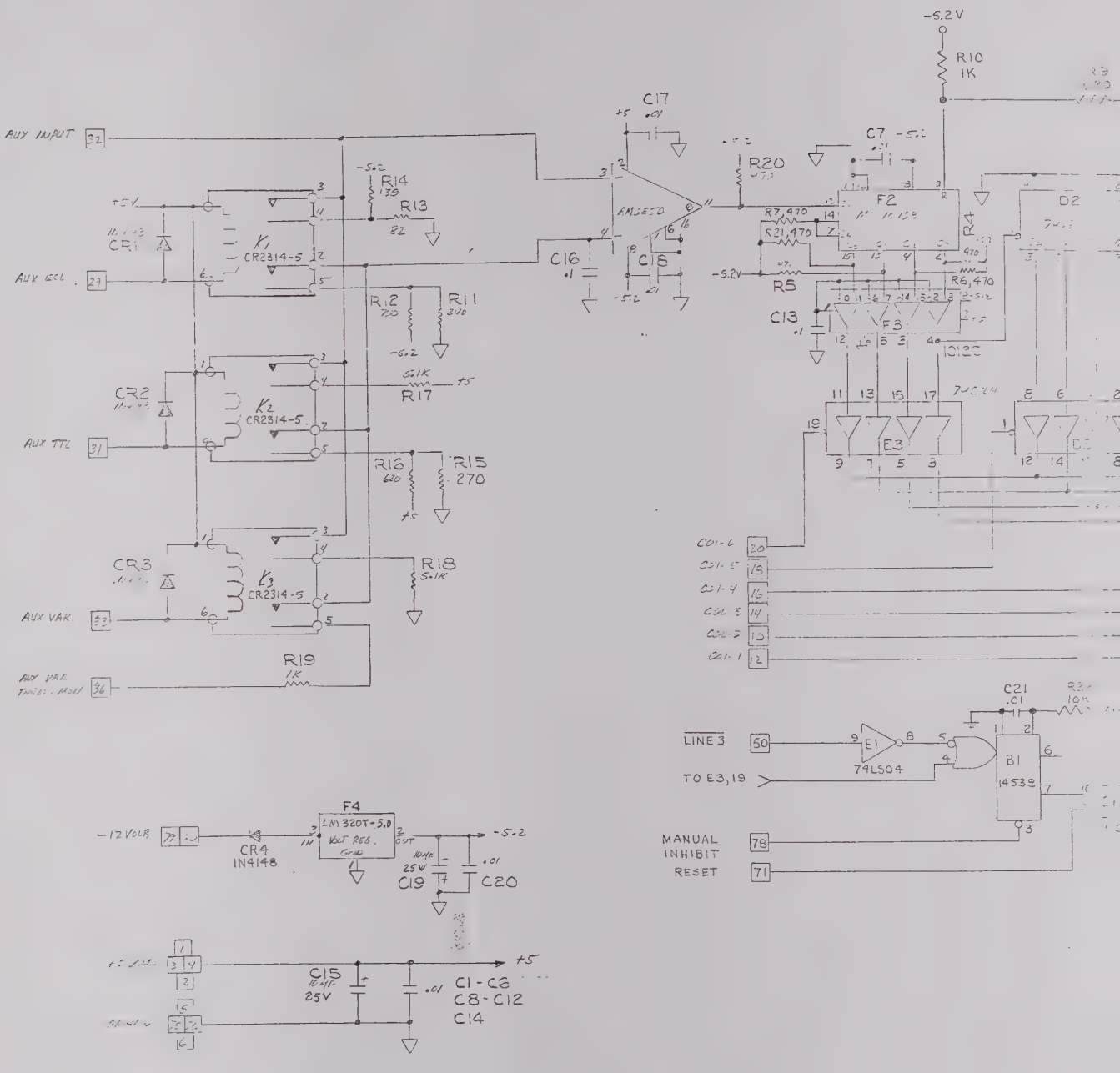
CONTR NO.

DR	K BEAUDRE	7/10/80
CHK	B. COOPER	2/13/81
APPD	K. BEAUDRE	3/18/80
APPROVED		
BY DIRECTION OF		

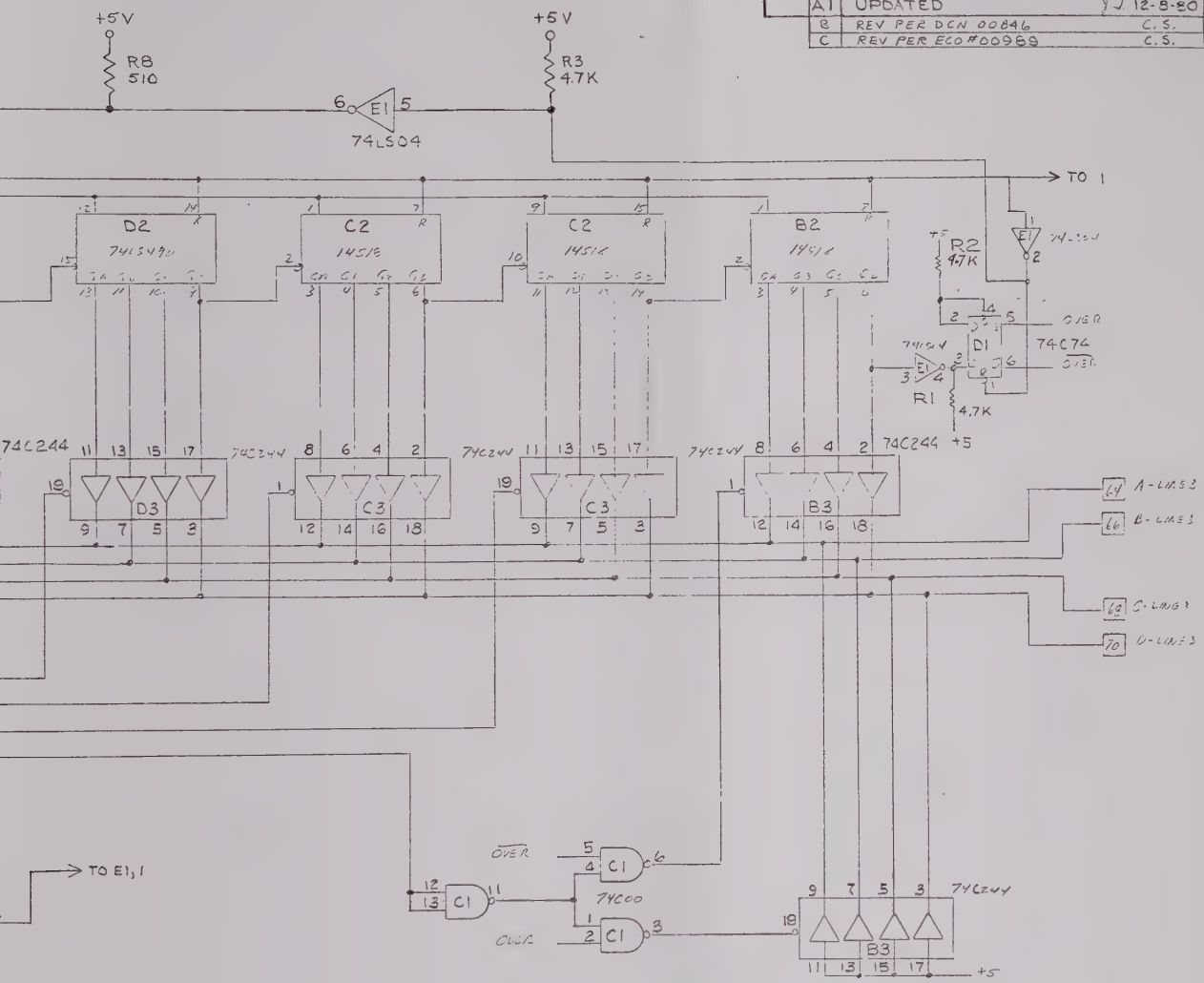
tau-tron inc
Chelmsford, Mass. 01824

DRAWING TITLE
S5000, T1 GENERATOR/RECEIVER
SCHEMTIC DIAGRAM

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		TDT-66030	B
SCALE	S5000-1	SHEET 1 OF 1	


AUX INPUT
AUX ECL
AUX TTL
AUX VAR.
CR1
CR2
CR3
K1 CR2314-5
K2 CR2314-5
K3 CR2314-5
R14 139
R13 82
R12 720
R11 240
R17 5.1K
R16 620
R15 270
R18 5.1K
R19 1K
C16 .1
C17 .01
C18
AM685D
R20
R10 1K
R5
R4
R7, 470
R21, 470
R6, 470
C13 .1
F2
F3
E3
-5.2V
+5
C01-6
C01-5
C01-4
C01-3
C01-2
C01-1
C21 .01
LINE 3
TO E3, 19
E1
74LS04
B1
MANUAL INHIBIT
RESET
-12 VOLT
CR4 IN4148
F4
LM320T-5.0
C19 10MF 25V
C20 .01
C15 10MF 25V
C1-C6
C8-C12
C14

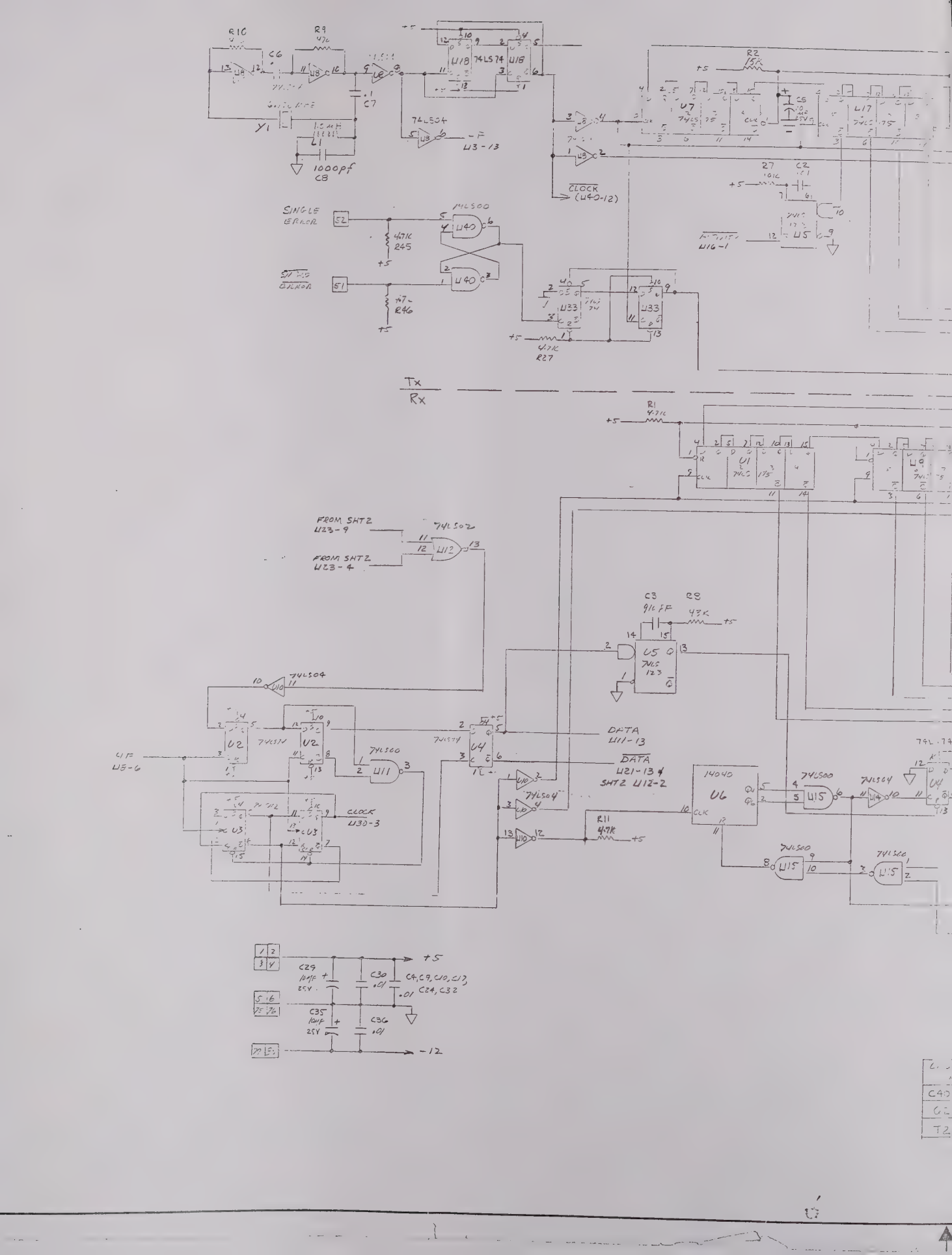
REVISIONS					
ZONE	LTR	DESCRIPTION		DATE	APPROVED
	A1	UPDATED	J.J. 12-8-80	12-8-80	
	B	REV PER DCN 00846	C.S.	2-9-81	
	C	REV PER ECO #00969	C.S.	9-8-81	



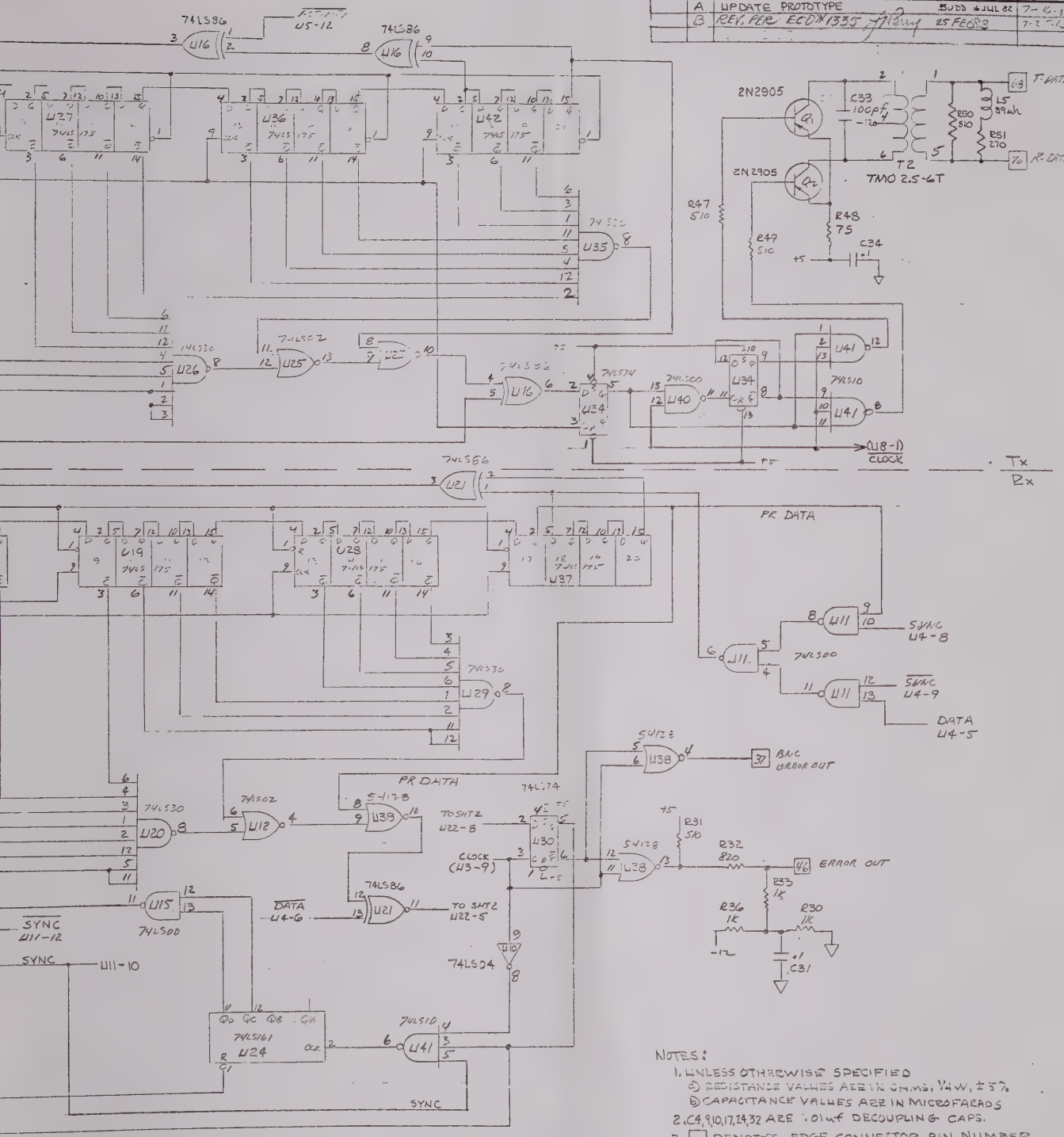
NOTES:

1. UNLESS OTHERWISE SPECIFIED:
   - A. RESISTOR VALUES ARE IN OHMS, ±5%, 1/4W.
   - B. CAPACITOR VALUES ARE IN MICROFARADS.
2. ☐ DENOTES EDGE CONNECTOR PIN NUMBER OR LETTER.

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CONTR NO.		tau-tron inc Chelmsford, Ma. 01824	
	TOLERANCES: ANGLES ±	DR K. Beaupre	11/12/80	DRAWING TITLE	
	FRACTIONS ±	CHK B. Cooper	12/8/80	S5000 AUX INTERFACE	
	3 PLACE DECIMALS ±	APPD K. Beaupre	12/8/80		
	2 PLACE DECIMALS ±				
	1 PLACE DECIMALS ±				
TDJ-66032 S-5000	MATERIAL:	APPROVED		SIZE D	CODE IDENT NO.
NEXT ASSY USED ON		BY DIRECTION OF		DRAWING NO. TDJ-66060	REV C
APPLICATION				SCALE S5000	SHEET 1 OF 1


R10
R9
C6
C7
Y1
L1
1000pf
C8
74LS04
U3-13
74LS00
SINGLE ERROR
S2
S1
4.7K
R45
R46
R27
CLOCK (U40-12)
R2
C5
C2
U16-1
Tx
Rx
R1
FROM SHT2 U23-9
FROM SHT2 U23-4
74LS02
C3
R8
DATA U11-13
DATA U21-13 & SHT2 U12-2
R11
CLOCK U30-3
14040
U6
74LS64
U15
+5
-12
C29
C30
C35
C36
C4, C9, C10, C13, C24, C32

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	UPDATE PROTOTYPE BUDD & JLL 82	7-16-82	RL
	B	REV. PER ECO#1335 JMurray 25 FEB 83	7-2-13	RL



NOTES:
1. UNLESS OTHERWISE SPECIFIED
   a) RESISTANCE VALUES ARE IN OHMS, 1/4 W, ±5%
   b) CAPACITANCE VALUES ARE IN MICROFARADS
2. C4,9,10,17,24,32 ARE .01uf DECOUPLING CAPS.
3. [ ] DENOTES EDGE CONNECTOR PIN NUMBER

REF. DES.
D
R3
L5
51
51
J4Z
Y1

D-66037	55000 REV
NEXT ASSY	USED ON
APPLICATION	

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:

CONTR NO.

DR	BUDD	4-1-82
CHK	RJL	4-14-82
APPD		

APPROVED

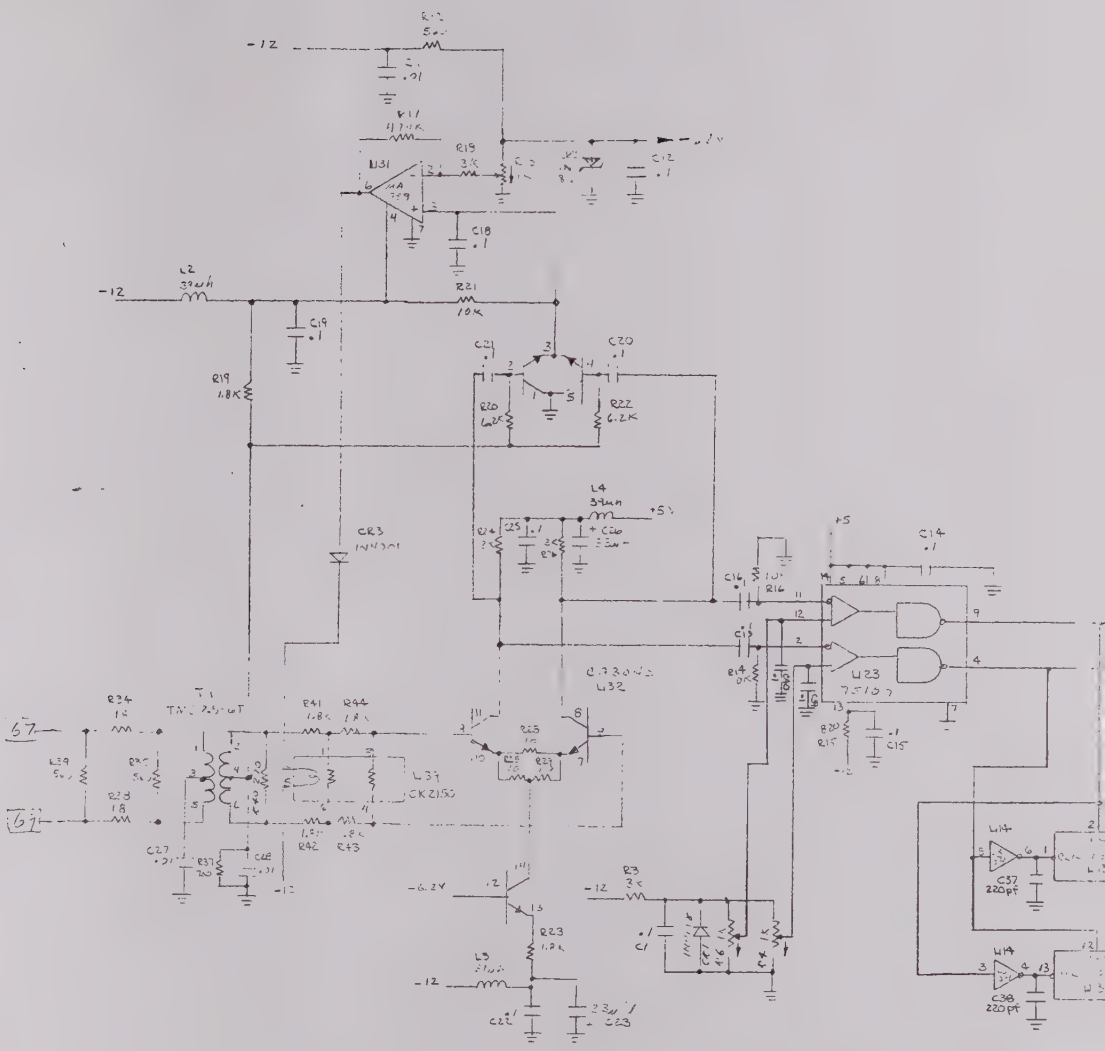
BY DIRECTION OF

tau-tron INC Chelmsford, Ma. 01824

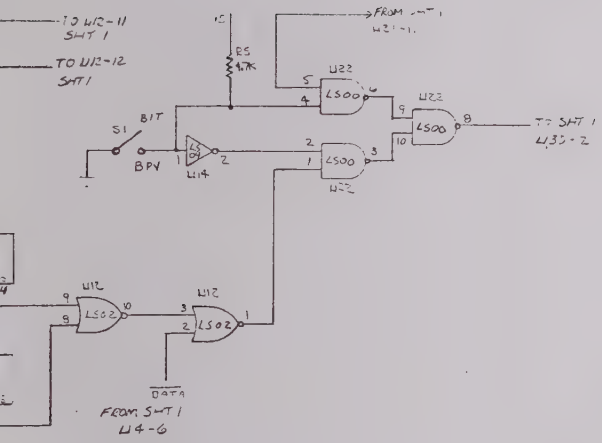
DRAWING TITLE: SCHEMATIC DIAGRAM. TI GENERATOR

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		D-66085	B

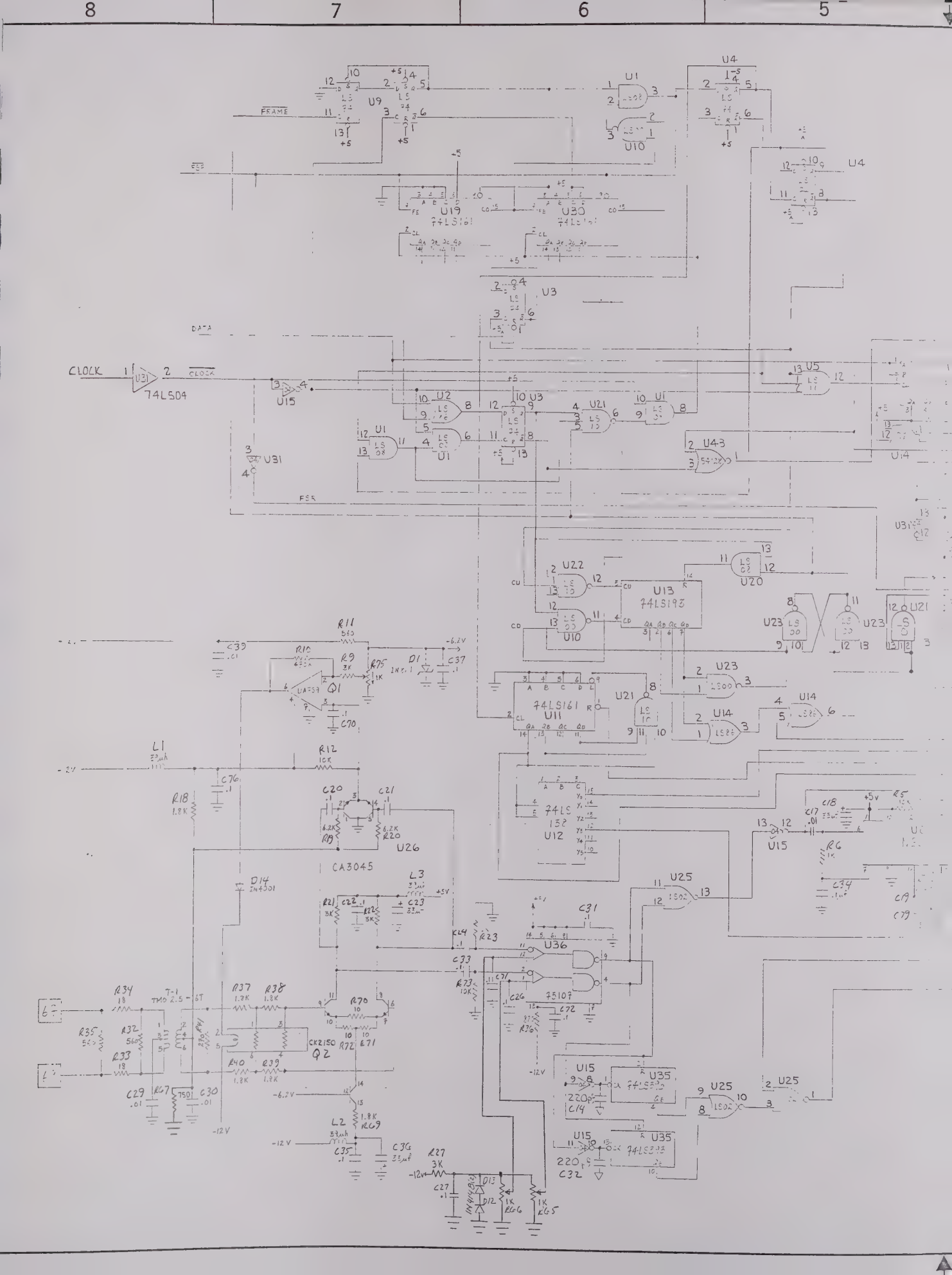
SCALE NL | 55000 REV | SHEET 1 OF 2


-12
R17
5.6K
C11
.01
R11
47.5K
R19
3K
U31
1/4
339
C12
.1
C18
.1
L2
39uH
R21
10K
C19
.1
C21
C20
.1
R19
1.8K
R20
6.2K
R22
6.2K
L4
39uH
+5
CR3
1N4001
C24
.1
C25
.1
C26
33uF
C14
.1
C16
.1
R16
10K
C13
.1
R14
10K
U23
7.5107
C15
.1
R24
1K
T1
TWO 25-0-T
R41
1.8K
R44
1.8K
U32
C7730-2
R25
1K
R26
1K
R23
1K
L39
5uH
R40
5uH
R39
1K
L37
CK2150
R42
1.3K
R43
.8K
C27
.01
R37
2K
C28
.01
-12
-6.2V
R23
1.2K
L3
27uH
C22
.1
C23
33uF
R3
3K
C1
.1
C4
.1
U14
C37
220pf
U14
C38
220pf

SEE SHT 1

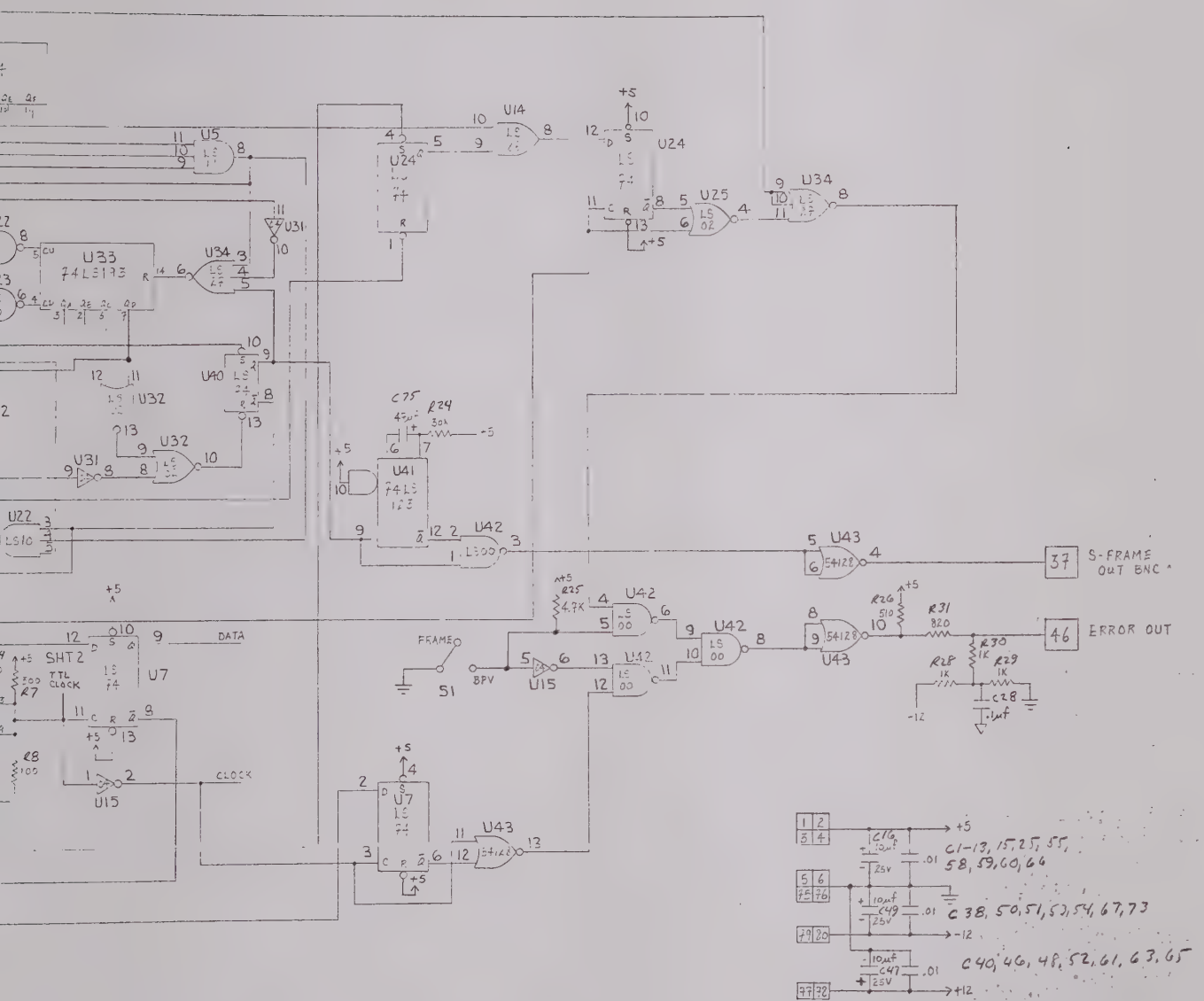


D-66087	S5000 RX	Budd 4-1-82	tau-tron inc Chelmsford MA 01824
NEXT ASSY	USED ON	RJ.L 4-14-82	SCHEMATIC DIAGRAM TI GENERATOR.
APPLICATION	MATERIAL	APPROVED	SIZE D · DRAWING NO D-66085 · REV B
	1 PLACE DECIMALS ±		SCALE ∝ · S5000 RX · SHEET 2 OF 2
	2 PLACE DECIMALS ±		
	3 PLACE DECIMALS ±		

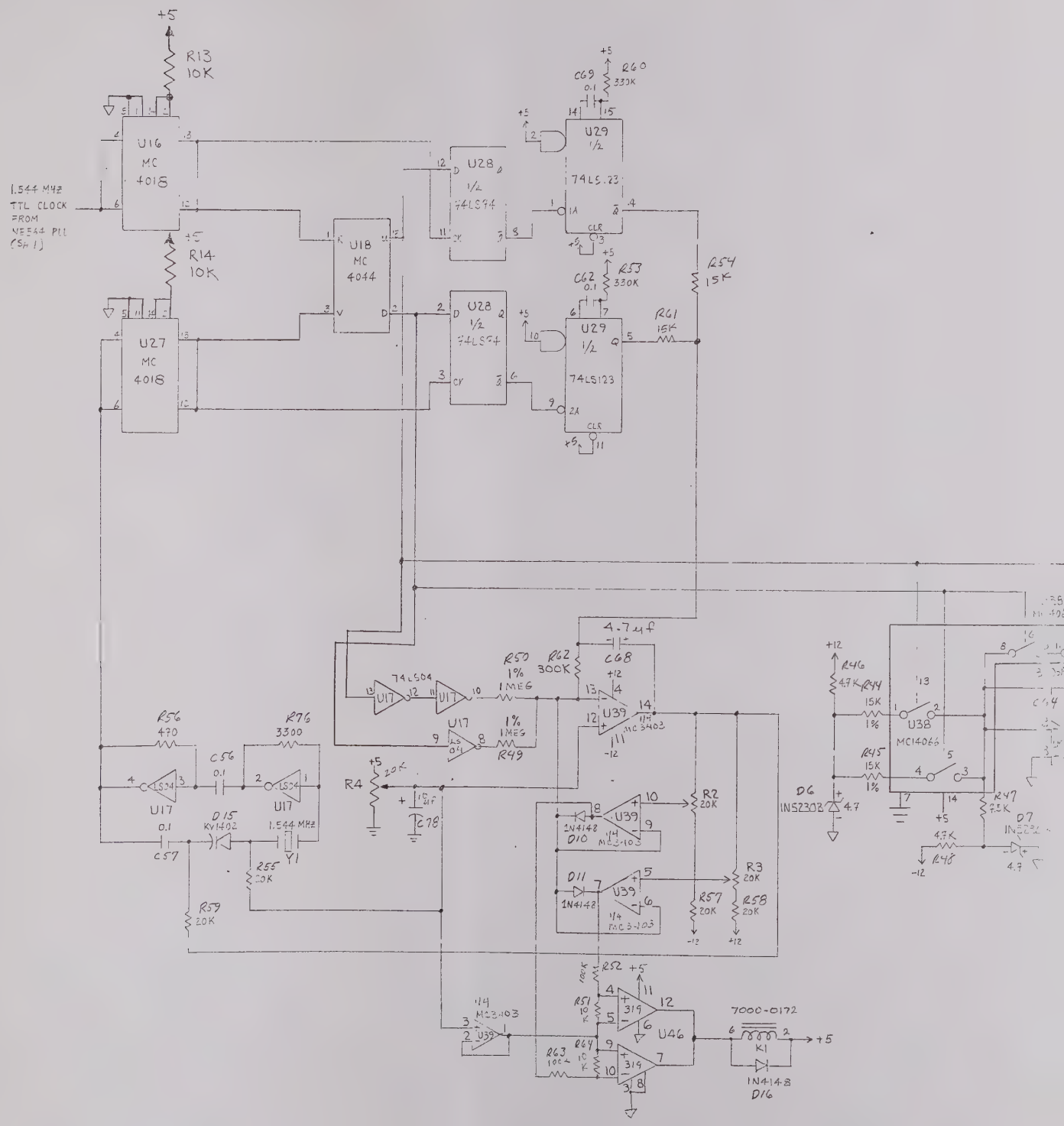

8
7
6
5
FRAME
DATA
CLOCK
74LS04
74LS161
74LS193
74LS132
CA3045
2N4501
1N4733
FSR

4	3	2	1

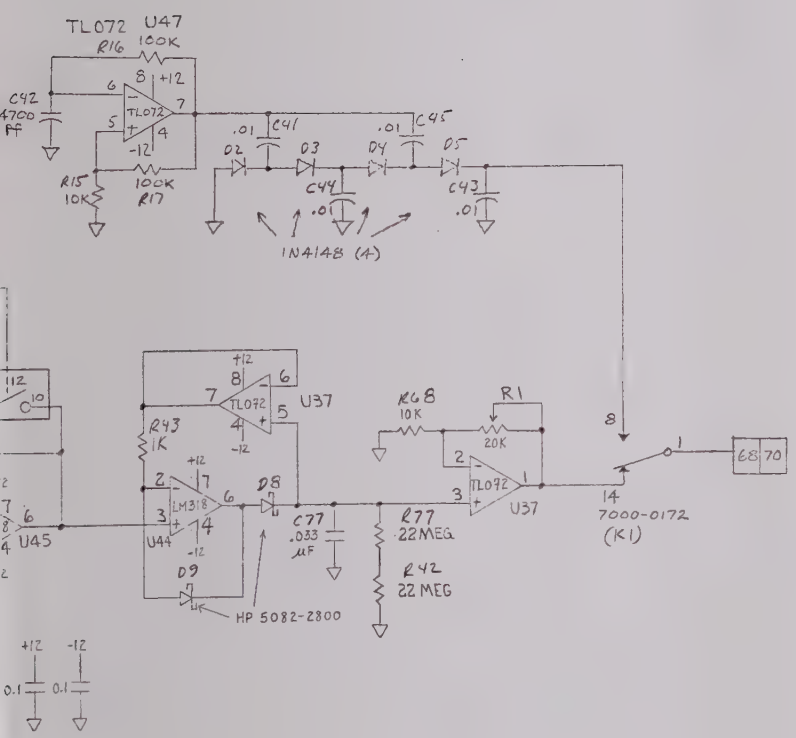
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	1	UPDATED BMB 8-10-83	9/7/83	
	2	UPDATED WM 1-6-84		
	A	REV PER ECO# 01817 M.E.H 6-6-84	6/6/84	



WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± FRACTIONS ± 3 PLACE DECIMALS ± 2 PLACE DECIMALS ± 1 PLACE DECIMALS ± MATERIAL:	CONTR NO.	tau-tron INC Chelmsford, Ma. 01824		
		DR ELLIOT S. KIM 2/3/83	DRAWING TITLE S-5000 FRAME - JITTER CARD.		
		CHK			
		APPD			
NEXT ASSY / USED ON		APPROVED	SIZE D	CODE IDENT NO.	DRAWING NO. D-66091 REV A
APPLICATION		BY DIRECTION OF	SCALE		SHEET 1 OF 2


1.544 MHz TTL CLOCK FROM NE564 PLL (SH 1)
R13 10K
R14 10K
U16 MC 4018
U27 MC 4018
U18 MC 4044
U28 1/2 74LS74
U29 1/2 74LS123
74LS.23
C69 0.1
R60 330K
C62 0.1
R53 330K
R54 15K
R61 15K
4.7μf
C68
R50 1% 1MEG
R62 300K
R49 1% 1MEG
74LS04
U17
U39 1/4 MC3403
R56 470
R76 3300
C56 0.1
C57 0.1
D15 KV1402
1.544 MHz
Y1
255 20K
R59 20K
R4 20K
C78 10μf
R2 20K
R3 20K
R57 20K
R58 20K
D10 1N4148
D11 1N4148
1/4 MC3403
R52 100K
R51 10K
R63 10K
R64 10K
U46
7000-0172
K1
D16 1N4148
R46 4.7K
R44 15K 1%
R45 15K 1%
U38 MC14066
R47 7.5K
R48 4.7K
D6 IN5230B 4.7
D7 IN5232B 4.7
+5
+12
-12

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		LOCK DETECTION CKT.	4/8/83	DHW



WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CONTR NO.	tau-tron inc Chelmsford, Ma. 01824		
	TOLERANCES: ANGLES ±	DR Elliot S. Kim 3/3/83	DRAWING TITLE		
	FRACTIONS ±	CHK	S-5000 FRAME - JITTER CARD		
	3 PLACE DECIMALS ±	APPD			
	2 PLACE DECIMALS ±				
	1 PLACE DECIMALS ±				
NEXT ASSY / USED ON	MATERIAL:	APPROVED	SIZE D	CODE IDENT NO.	DRAWING NO. D-66091 REV A
APPLICATION		BY DIRECTION OF	SCALE		SHEET 2 OF 3

D-66091

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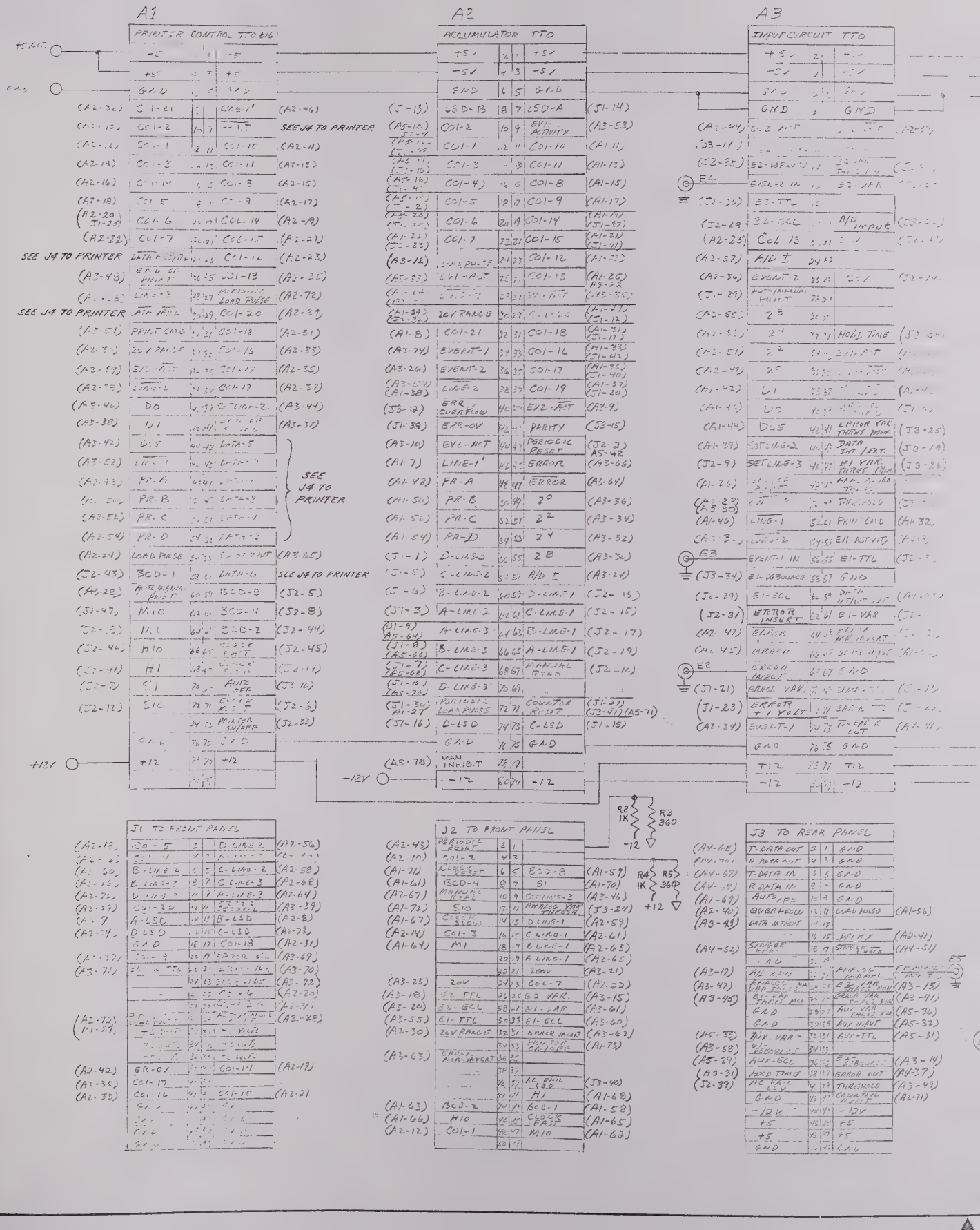

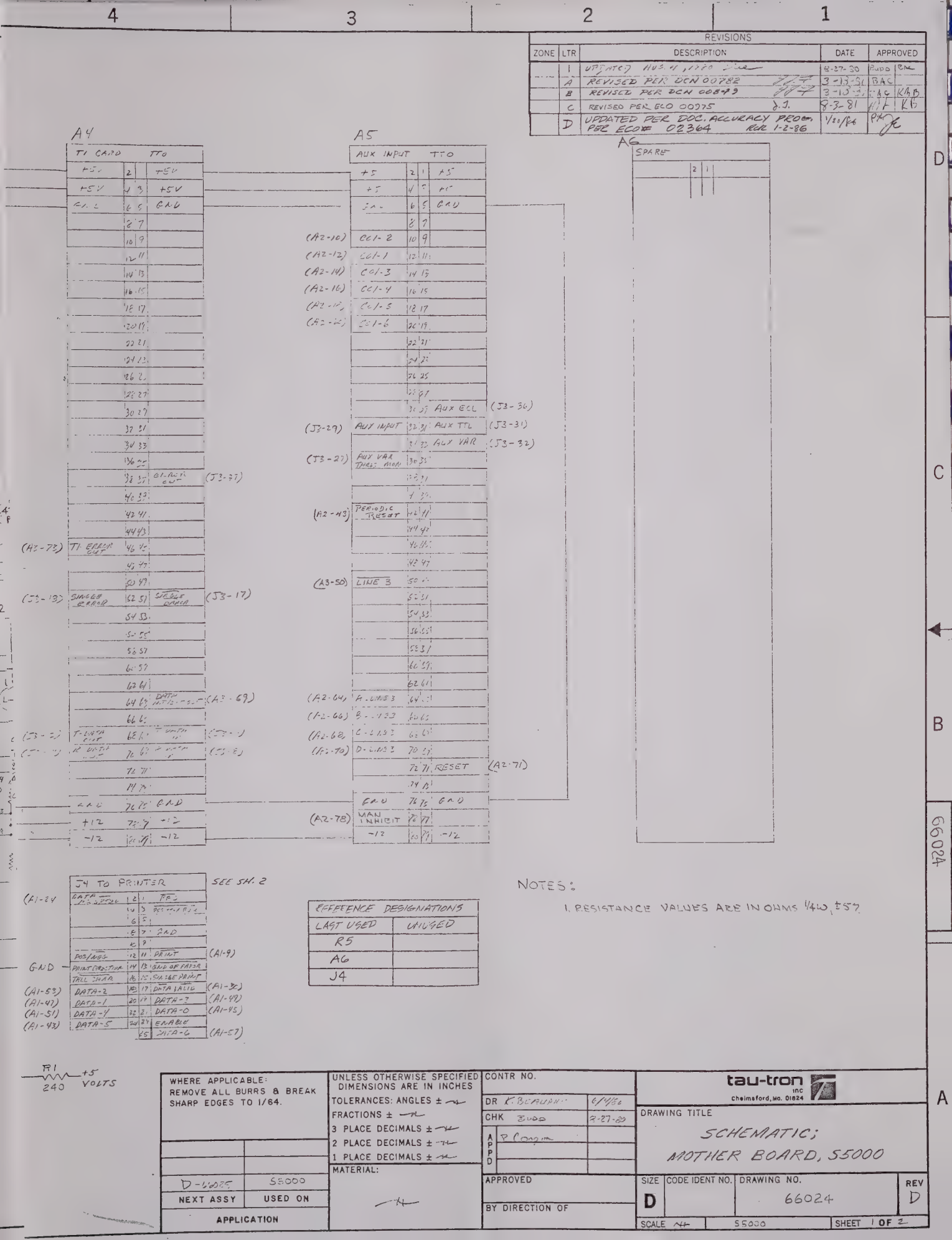
4
3
2
1
REVISIONS
ZONE | LTR | DESCRIPTION | DATE | APPROVED
1 | UPDATED PER ECO 02364 | 8-27-30 | Budd
A | REVISED PER DCN 00782 | 3-13-81 | BAC
B | REVISED PER DCN 00879 | 3-13-81 | BAC KAB
C | REVISED PER ECO 00975 | 8-3-81 | KAB KB
D | UPDATED PER DOC. ACCURACY PROG. PER ECO# 02364 RUR 1-2-86 | 1/20/86 | PAT
A4
TI CARD TTO
A5
AUX INPUT TTO
A6
SPARE
(A2-10) CCI-2
(A2-12) CCI-1
(A2-14) CCI-3
(A2-16) CCI-4
(A2-18) CCI-5
(A2-20) CCI-6
AUX ECL (J3-36)
(J3-29) AUX INPUT AUX TTL (J3-31)
AUX VAR (J3-32)
(J3-27) AUX VAR THRST MON
(J3-37)
(A2-43) PERIODIC RESET
(A3-73) TI ERROR OUT
(J3-19) SINGLE ERROR SINGLE CMD (J3-17)
(A3-50) LINE 3
(A3-69)
(A2-64) A-LINE 3
(A2-66) B-LINE 3
(A2-68) C-LINE 3
(A2-70) D-LINE 3
(A2-71) RESET
GND
+12
-12
(A2-78) MAN INHIBIT
J4 TO PRINTER
SEE SH. 2
(A1-24)
GND
(A1-9) PRINT
(A1-53) DATA-2 (A1-36)
(A1-47) DATA-1 (A1-49)
(A1-51) DATA-4 (A1-45)
(A1-43) DATA-5 (A1-57)
DATA-6
R1 240 +5 VOLTS
NOTES:
1. RESISTANCE VALUES ARE IN OHMS 1/4W, ±5%
REFERENCE DESIGNATIONS
LAST USED | UNUSED
R5
A6
J4
WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ±
FRACTIONS ±
3 PLACE DECIMALS ±
2 PLACE DECIMALS ±
1 PLACE DECIMALS ±
MATERIAL:
CONTR NO.
DR K. BEAUPRE 6/4/86
CHK Budd 2-27-86
APPD R Conquin
APPROVED
BY DIRECTION OF
tau-tron inc
Chelmsford, Ma. 01824
DRAWING TITLE
SCHEMATIC; MOTHER BOARD, S5000
D-66025 S5000
NEXT ASSY USED ON
APPLICATION
SIZE D
CODE IDENT NO.
DRAWING NO. 66024
REV D
SCALE NT
S5000
SHEET 1 OF 2
66024

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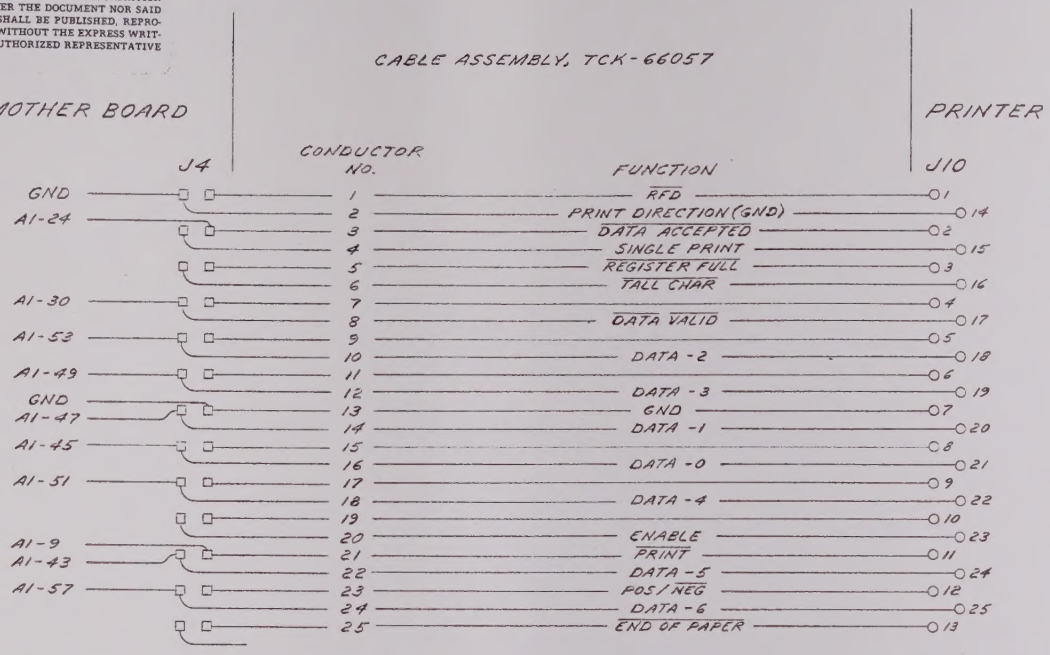
CABLE ASSEMBLY, TCK-66057



INTERCONNECTION, MOTHER BOARD (J4) TO PRINTER (J10)

4	3	2	1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
SEE SHT. 1 FOR REVISIONS				

WHERE APPLICABLE: REMOVE ALL BURRS & BREAK SHARP EDGES TO 1/64.	
D-66025	55000
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ± ~
FRACTIONS ± ~
3 PLACE DECIMALS ± ~
2 PLACE DECIMALS ± ~
1 PLACE DECIMALS ± ~
MATERIAL: ~

CONTR NO.		
DR	Flanagan	MAR 6, '81
CHK		
APPD	K. Beaupre	3/17/81
APPROVED		
BY DIRECTION OF		

tau-tron inc
Chelmsford, Ma. 01824

DRAWING TITLE
SCHEMATIC:
MOTHER BOARD, 55000

SIZE	CODE IDENT NO.	DRAWING NO.	REV
D		66024	D
SCALE ~	55000	SHEET 2 of 2	

10 Lyberty Way, Westford, MA 01886
(617) 692-5100 Telex 750245 1-800-TAU-TRON (Outside MA)